RESOURCE AND PATIENT MANAGEMENT SYSTEM

IHS Clinical Reporting System (BGP)

Other National Measures (ONM) Report
Performance Measure List and Definitions

Version 9.0
August 2009

Office of Information Technology (OIT)
Division of Information Resource Management
Albuquerque, New Mexico
## Revision History

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision</th>
<th>Description</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/21/09</td>
<td>1</td>
<td>Distribution to GPRA Coordinators and CRS listserv.</td>
<td>S. Klepacki</td>
</tr>
</tbody>
</table>
| 07/15/09   | 2        | (1) Revised denominator description for all topics that use the Active Diabetic denominator to reflect the current wording from the CRS report. There are no actual logic changes.  

(2) Appropriate Medication Therapy after a Heart Attack, Persistence of Appropriate Medication Therapy after a Heart Attack, Appropriate Medication Therapy in High Risk Patients, and HIV Screening, pregnancy definition: Indicated the corrections that were made to CRS programming logic to make it consistent with the CRS textual descriptions of the logic. The textual descriptions of the performance measure definition did not change. | S. Klepacki |
TABLE OF CONTENTS

1.0 Introduction ............................................................................................................. 1
1.1 CRS Denominator Definitions ............................................................................... 1
  1.1.1 For All Denominators ............................................................................... 1
  1.1.2 Active Clinical Population for National GPRA & PART Reporting .............. 1
  1.1.3 Active Clinical Population for Local Reports .............................................. 1
  1.1.4 User Population for National GPRA & PART Reporting .............................. 2
  1.1.5 User Population for Local Reports .............................................................. 2
  1.1.6 Active Clinical CHS Population for National GPRA & PART Reporting (CHS-only sites) ............................................................................... 2
  1.1.7 Active Clinical CHS Population for Local Reports (CHS-only sites) .......... 3

2.0 Other National Measures (ONM) Report Performance Measure Topics and Definitions ............................................................................................................... 4
  2.1 Diabetes Group .................................................................................................. 4
    2.1.1 Diabetes Comprehensive Care ................................................................. 4
  2.2 Dental Group ..................................................................................................... 8
    2.2.1 Topical Fluoride ....................................................................................... 8
  2.3 Immunization Group ......................................................................................... 9
    2.3.1 Adult Immunizations: Influenza ............................................................... 9
    2.3.2 Adult Immunizations: Pneumovax .......................................................... 11
    2.3.3 Childhood Immunizations ...................................................................... 12
    2.3.4 Adolescent immunizations .................................................................... 13
  2.4 Cancer Screen Group ...................................................................................... 18
    2.4.1 Tobacco Cessation ................................................................................... 18
  2.5 Behavioral Health Group .................................................................................. 22
    2.5.1 Alcohol Screening and Brief Intervention (ASBI) in the ER ...................... 22
    2.5.2 Depression Screening ............................................................................ 25
  2.6 Cardiovascular Disease Related Group ........................................................... 27
    2.6.1 Cardiovascular Disease and Cholesterol Screening ................................. 27
    2.6.2 Cardiovascular Disease and Blood Pressure Control ............................... 28
    2.6.3 Appropriate Medication Therapy after a Heart Attack ............................... 29
    2.6.4 Persistence of Appropriate Medication Therapy after a Heart Attack ......... 36
    2.6.5 Appropriate Medication Therapy in High Risk Patients ............................ 44
    2.6.6 Cholesterol Management for Patients with Cardiovascular Conditions ....... 51
    2.6.7 Heart Failure and Evaluation of LVS Function ........................................... 53
  2.7 STD-Related Group .......................................................................................... 55
    2.7.1 HIV Screening ......................................................................................... 55
    2.7.2 Sexually Transmitted Infection (STI) Screening ...................................... 56
  2.8 Other Clinical Measures Group ....................................................................... 60
    2.8.1 Prediabetes/Metabolic Syndrome ............................................................ 60
    2.8.2 Public Health Nursing ............................................................................ 64
2.8.3 Breastfeeding Rates

3.0 Contact Information
1.0 Introduction

The Other National Measures (ONM) Report contains clinical quality measures for which national data is desired. The majority of these measures were historically reported in the National GPRA Report as non-GPRA measures. The ONM Report provides valuable information on the quality of care that is being provided to patients and can be used to address other national reporting requirements. Data for these measures will be collected and reported at least once annually.

1.1 CRS Denominator Definitions

1.1.1 For All Denominators

- All patients with name “DEMO, PATIENT” will be excluded automatically for all denominators.
- For all measures except as noted, patient age is calculated as of the beginning of the Report Period.

1.1.2 Active Clinical Population for National GPRA & PART Reporting

- Must have two visits to medical clinics in the past three years. Chart reviews and telephone calls from these clinics do not count; the visits must be face-to-face. At least one visit must be to a core medical clinic. Refer to the Clinical Reporting System (CRS) for FY2009 Clinical Measures User Manual for listing of these clinics.
- Must be alive on the last day of the Report Period.
- Must be American Indian/Alaska Native (AI/AN) - defined as Beneficiary 01.
- Must reside in a community specified in the site’s GPRA community taxonomy, defined as all communities of residence in the defined CHS catchment area.

1.1.3 Active Clinical Population for Local Reports

- Must have two visits to medical clinics in the past three years. Chart reviews and telephone calls from these clinics do not count; the visits must be face-to-face. At least one visit must be to a core medical clinic. Refer to the Clinical Reporting System (CRS) for FY2009 Clinical Measures User Manual for listing of these clinics.
• Must be alive on the last day of the Report Period.
• User defines population type: AI/AN patients only, non AI/AN, or both.
• User defines general population: single community, group of multiple communities (community taxonomy), user-defined list of patients (patient panel), or all patients regardless of community of residence.

1.1.4 User Population for National GPRA & PART Reporting
• Must have been seen at least once in the three years prior to the end of the time period, regardless of the clinic type, and the visit must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
• Must be alive on the last day of the Report Period.
• Must be American Indian/Alaska Native (AI/AN) - defined as Beneficiary 01.
• Must reside in a community specified in the site’s GPRA community taxonomy, defined as all communities of residence in the defined CHS catchment area.

1.1.5 User Population for Local Reports
• Must have been seen at least once in the three years prior to the end of the time period, regardless of the clinic type, and the visit must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
• Must be alive on the last day of the Report Period.
• User defines population type: AI/AN patients only, non AI/AN, or both.
• User defines general population: single community, group of multiple communities (community taxonomy), user-defined list of patients (patient panel), or all patients regardless of community of residence.

1.1.6 Active Clinical CHS Population for National GPRA & PART Reporting (CHS-only sites)
• Must have two CHS visits in the three years prior to the end of the Report Period, and the visits must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.
• Must be alive on the last day of the Report period.
• Must be American Indian/Alaska Native (AI/AN) - defined as Beneficiary 01. This data item is entered and updated during the Patient Registration process.

• Must reside in a community included in the site’s “official” GPRA community taxonomy, defined as all communities of residence in the CHS catchment area specified in the community taxonomy specified by the user.

1.1.7 Active Clinical CHS Population for Local Reports (CHS-only sites)

• Must have two CHS visits in the three years prior to the end of the Report Period, and the visits must be either ambulatory (including day surgery or observation) or a hospitalization; the rest of the service categories are excluded.

• Must be alive on the last day of the Report period.

• User defines population type: AI/AN patients only, non AI/AN, or both.

• User defines general population: single community, group of multiple communities (community taxonomy), user-defined list of patients (patient panel), or all patients regardless of community of residence.
2.0 Other National Measures (ONM) Report Performance Measure Topics and Definitions

The following sections define the performance measure topics and their definitions that are included in the CRS 2009 Version 9.0 Other National Measures (ONM) Report.

Note: Bold italic font indicates new or edited definitions

2.1 Diabetes Group

2.1.1 Diabetes Comprehensive Care

Changes from Version 8.0 Patch 3 noted below.

Owner/Contact

Diabetes Program/Dr. Marie Russell

Denominator

Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes (POV 250.00-250.93) prior to the Report Period, AND at least 2 visits in the past year, AND 2 DM-related visits ever.

Numerators

1) Patients with hemoglobin A1c documented during the Report Period, regardless of result.
2) Patients with blood pressure documented during the Report Period
3) Patients with controlled blood pressure during the Report Period, defined as < 130/80. This measure is NOT included in the comprehensive measure (numerator 8 below).
4) Patients with LDL completed during the Report Period, regardless of result
5) Patients with nephropathy assessment, defined as an estimated GFR and a quantitative urinary protein assessment during the Report Period OR with evidence of diagnosis and/or treatment of ESRD at any time before the end of the Report Period.
6) Patients receiving a qualified retinal evaluation during the Report Period, or a documented refusal of a diabetic retinal exam.
7) Patients with diabetic foot exam during the Report Period, or a documented refusal of a diabetic foot exam.

Definitions

1) **A1c**: Searches for most recent A1c test with a result during the Report Period. If none found, CRS searches for the most recent A1c test without a result. A1c defined as: CPT 83036, 83037, 3044F-3047F; LOINC taxonomy; or site-populated taxonomy DM AUDIT HGB A1C TAX.

2) **BP Documented**: CRS uses mean of last 3 Blood Pressures documented on non-ER visits during the Report Period. If 3 BPs are not available, uses the mean of last 2 non-ER BPs. If a visit contains more than one BP, the lowest BP will be used, defined as having the lowest systolic value. The mean Systolic value is calculated by adding the last 3 (or 2) systolic values and dividing by 3 (or 2). The mean Diastolic value is calculated by adding the diastolic values from the last 3 (or 2) blood pressures and dividing by 3 (or 2).

If CRS is not able to calculate a mean BP, it will search for CPT 3074F-3080F documented on a non-ER visit during the Report Period.

3) **Controlled BP**: CRS uses a mean, as described above. If the mean systolic and diastolic values do not BOTH meet the criteria for controlled, then the value is considered not controlled. If CRS is not able to calculate a mean BP, it will search for the most recent of any of the following CPT codes documented on non-ER visits during the Report Period: 3074F, 3075F, 3077F, 3078F, 3079F, and 3080F. The systolic and diastolic values do NOT have to be recorded on the same day. If there are multiple values on the same day, the CPT indicating the lowest value will be used. The following combination represents BP <130/80 and will be included in the numerator: CPT 3074F AND 3078F. All other combinations will NOT be included in the numerator.

4) **LDL**: Finds last test done during the Report period; defined as: CPT 80061, 83700, 83701, 83704, 83715 (old code), 83716 (old code), 83721, 3048F, 3049F, 3050F; LOINC taxonomy; site-populated taxonomy DM AUDIT LDL CHOLESTEROL TAX.

5) **Nephropathy Assessment**:  
   A) Estimated GFR with result during the Report Period, defined as any of the following: (A) Site-populated taxonomy BGP GPRA ESTIMATED GFR TAX or (B) LOINC taxonomy, AND  
   B) Quantitative Urinary Protein Assessment during the Report Period, defined as any of the following: (A) CPT 82042, 82043, or 84156; (B) LOINC taxonomy *(added codes 53121-0, 53530-2, 53531-0, and 53532-8)*; or (C) site-populated taxonomy BGP QUANT URINE PROTEIN (NOTE: Be sure and check with your laboratory supervisor that the names you add to your taxonomy reflect quantitative test values); OR
C) End Stage Renal Disease diagnosis/treatment defined as any of the following ever:  
A) V CPT 36145, 36800, 36810, 36815, 36818, 36819, 36820, 36821, 36831-36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, **90951-90970 or old codes 90918-90925, 90935, 90937, 90939 (old code), 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512, G0257, G0308-G0327, G0392, G0393, or S9339; B) V POV 585.5, 585.6, V42.0, V45.1 (old code), V45.11, V45.12, or V56.*; C) V Procedure 38.95, 39.27, 39.42, 39.43, 39.53, 39.93-39.95, 54.98, or 55.6*.

6) **Qualified Retinal Evaluation**: Defined as: a diabetic retinal exam or documented refusal OR other eye exam.

A) **Diabetic Retinal Exam**: Any of the following during the Report Period:
   (1) Exam Code 03 Diabetic Eye Exam (dilated retinal examination or validated photographic equivalent) or refusal of Exam 03;
   (2) CPT 2022F Dilated retinal eye exam; 2024F Seven standard field stereoscopic photos with interpretation by an ophthalmologist or optometrist; 2026F Eye imaging validated to match the diagnosis from seven standard field stereoscopic photos; S0620 Routine ophthalmological examination including refraction; new patient; S0621 Routine ophthalmological examination including refraction; established patient; S3000 Diabetic indicator; retinal eye exam, dilated, bilateral.

B) **Other Eye Exam**:
   (1) Non-DNKA (did not keep appointment) visits to ophthalmology, optometry, or validated tele-ophthalmology retinal evaluation clinics (e.g., JVN, Inoveon, EyeTel, etc.), or
   (2) non-DNKA visits to an optometrist or ophthalmologist. Searches for the following codes in the following order: Clinic Codes A2, 17, 18, 64; Provider Code 24, 79, 08; CPT 67028, 67038, 67039, 67040, 92002, 92004, 92012, 92014; POV V72.0; Procedure 95.02.

*Qualifying Retinal Evaluation: The following methods are qualifying for this measure:
   - Dilated retinal evaluation by an optometrist or ophthalmologist.
   - Seven standard fields stereoscopic photos (ETDRS) evaluated by an optometrist or ophthalmologist.
   - Any photographic method formally validated to ETDRS, e.g., JVN, Inoveon, EyeTel, etc.
7) **Diabetic Foot Exam:**
   A) Exam Code 28 Diabetic Foot Exam, Complete;
   B) non-DNKA visit with a podiatrist (provider codes 33, 84 or 25),
   C) non-DNKA visit to Podiatry Clinic (clinic code 65),
   D) CPT 2028F, or
   E) documented refusal of foot exam (Exam Code 28)

8) **Comprehensive Diabetes Care:** Patients with A1c AND Blood Pressure AND LDL AND Nephropathy Assessment AND Retinal exam AND Diabetic Foot Exam.

**Patient List Options**
1) List of diabetic patients who did have their A1c assessed.
2) List of diabetic patients who did not have their A1c assessed.
3) List of diabetic patients who did have their BP assessed.
4) List of diabetic patients who did not have their BP assessed.
5) List of diabetic patients with controlled BP, defined as <130/80.
6) List of diabetic patients with uncontrolled BP, defined as >130/80.
7) List of diabetic patients with LDL completed.
8) List of diabetic patients without LDL completed.
9) List of diabetic patients with nephropathy assessment.
10) List of diabetic patients without nephropathy assessment.
11) List of diabetic patients with retinal evaluation.
12) List of diabetic patients without retinal evaluation.
13) List of diabetic patients with a diabetic foot exam.
14) List of diabetic patients without a diabetic foot exam.
15) List of diabetic patients with comprehensive diabetes care.
16) List of diabetic patients without comprehensive diabetes care.
2.2 Dental Group

2.2.1 Topical Fluoride

No Changes from Version 8.0 Patch 3.

Owner/Contact
Dental Program/Dr. Patrick Blahut

Denominator
None

Numerator
1) Count only (no percentage comparison to denominator). For patients meeting the User Population definition, the total number of appropriate topical fluoride applications and refusals based on a maximum of four per patient per year.
   A) Number of documented refusals during past year.

Definitions
1) Topical Fluoride Application: V Dental ADA codes 1201 (old code), 1203, 1204, 1205 (old code), or 1206; or V POV V07.31. A maximum of one application per patient per visit is allowed. A maximum of four topical fluoride applications are allowed per patient per year for the applications measure.
2) Refusal of Topical Fluoride Application: Refusal of ADA code 1201 (old code), 1203, 1204, 1205 (old code), or 1206. Refusals are only counted if a patient did not have a topical fluoride application during the Report Period. If a patient had both an application and a refusal, only the application will be counted. If a patient has multiple refusals, only one refusal will be counted.

Patient List Options
List of patients who received or refused at least one topical fluoride application during Report period.
2.3 Immunization Group

2.3.1 Adult Immunizations: Influenza

No Changes from Version 8.0 Patch 3.

Owner/Contact
Epidemiology Program/Amy Groom, MPH

Denominator
Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes (POV 250.00-250.93) prior to the Report Period, AND at least 2 visits in the past year, AND 2 DM-related visits ever.

Numerators
1) Patients with influenza vaccine or refusal documented during the Report Period or with a contraindication documented at any time before the end of the Report Period.
   A) Patients with documented refusal.
   B) Patients with a contraindication or a documented NMI (not medically indicated) refusal.

Definitions
1) **Influenza Vaccine**: Any of the following during the Report Period:
   A) Immunization/CVX codes 15, 16, 88, or 111;
   B) POV V04.8 (old code), V04.81, V06.6;
   C) CPT 90655-90662 (old code), G0008, G8108;
   D) ICD Procedure 99.52.
2) **Contraindication to Influenza Vaccine**: Any of the following documented at any time before the end of the Report Period:
   A) Contraindication in the Immunization Package of “Egg Allergy” or “Anaphylaxis,” or
   B) PCC NMI Refusal.
3) **Refusal of Influenza Vaccine**:
   A) Refusal of immunization/CVX codes 15, 16, 88, or 111 as documented in PCC Refusal File (i.e., REF), or
   B) In the Immunization Package as contraindication of “Patient Refusal.”
Patient List Options

1) List of diabetic patients with influenza vaccination, contraindication, or refusal.
2) List of diabetic patients without influenza vaccination, contraindication, or refusal.
2.3.2 Adult Immunizations: Pneumovax

No Changes from Version 8.0 Patch 3.

Owner/Contact
Epidemiology Program/Amy Groom, MPH

Denominator
Active Diabetic patients, defined as all Active Clinical patients diagnosed with diabetes (POV 250.00-250.93) prior to the Report Period, AND at least 2 visits in the past year, AND 2 DM-related visits ever.

Numerator
1) Patients with Pneumococcal vaccine or contraindication documented at any time before the end of the Report Period or with a refusal in the past year.
   A) With documented refusal.
   B) Patients with contraindication or a documented NMI (not medically indicated) refusal.

Definitions
1) Pneumovax Vaccine:
   A) Immunization/CVX codes 33, 100, and 109;
   B) POV V06.6, V03.82;
   C) ICD Procedure 99.55;
   D) CPT 90732, 90669, G0009, G8115.

2) Contraindication to Pneumovax Vaccine:
   A) Contraindication in the Immunization Package of “Anaphylaxis,” or
   B) PCC NMI Refusal.

1) Refusal of Pneumovax Vaccine:
   A) Immunization codes 33, 100, or 109, as documented in PCC Refusal File (i.e., REF) or
   B) Immunization Package contraindication of “Patient Refusal.”

Patient List Options
1) List of diabetic patients with pneumovax vaccination, contraindication, or refusal.
2) List of diabetic patients without pneumovax vaccination, contraindication, or refusal.
2.3.3 Childhood Immunizations

Changes from Version 8.0 Patch 3 noted below.

DELETED: All performance measures and logic for Childhood Immunizations from the CRS Version 9.0 ONM Report. Refer to CRS Version 9.0 COM Selected Measures Report for Childhood Immunizations measures and logic.
2.3.4 Adolescent immunizations

No Changes from Version 8.0 Patch 3.

Owner/Contact
Epidemiology Program/Dr. Scott Hamstra, Amy Groom, MPH

Denominators
1) Active Clinical patients ages 13-17.
2) Female Active Clinical patients ages 13-17.

Numerators
1) Patient who have received the 1:3:2:1 combination (i.e., 1 Td/Tdap, 3 Hepatitis B, 2 MMR, 1 Varicella), including refusals, contraindications, and evidence of disease.
2) Patients who have received 1 dose of Tdap ever, including refusals, contraindications, and evidence of disease.
3) Patients who have received 1 dose of meningococcal ever, including refusals, contraindications, and evidence of disease.
4) Patients who have received 3 doses of HPV ever, including refusals, contraindications, and evidence of disease.

Note: Included for Female Active Clinical ages 13-17 only.

Definitions
1) **Timing of Doses**: Because IZ data comes from multiple sources, any IZ codes documented on dates within 10 days of each other will be considered as the same immunization.
2) **Dosage and Types of Immunizations**:
   A) 1 dose of Td or Tdap
   B) 2 doses of MMR:  
      1) 2 MMRs;  
      2) 2 M/R and 2 Mumps;  
      3) 2 R/M and 2 Measles; or  
      4) 2 each of Measles, Mumps, and Rubella.
   C) 3 doses of Hep B OR 2 doses IF documented with CPT 90743.
   D) 1 dose of Varicella
   E) 1 dose of Meningococcal
   F) 3 doses of HPV
3) **Refusal, Contraindication, and Evidence of Disease Information**: Refusals, evidence of disease, and contraindications for individual immunizations will also count toward meeting the definition, as defined below.
A) Each immunization must be refused and documented separately. For example, if a patient refused Rubella only, then there must be an immunization, contraindication, or separate refusal for the Measles and Mumps immunizations.

B) For immunizations where required number of doses is >1, only one refusal is necessary to be counted in the numerator. For example, if there is a single refusal for Hepatitis B, the patient will be included in the numerator.

C) For immunizations where required number of doses is >1, only one contraindication is necessary to be counted in the numerator. For example, if there is a single contraindication for HiB, the patient will be included in the numerator.

D) Evidence of disease will be checked for at any time in the child's life (prior to the end of the Report period.)

E) To be counted in sub-numerator A, a patient must have a REF refusal in PCC or a Parent or Patient Refusal in the IZ program for any of the immunizations in the numerator. For example, if a patient refused Rubella only but had immunizations for Measles and Mumps, the patient would be included in sub-numerator A.

F) To be counted in sub-numerator B, a patient must have evidence of disease, a contraindication, or an NMI refusal for any of the immunizations in the numerator. For example, if a patient was Rubella immune but had a Measles and Mumps immunization, the patient would be included in sub-numerator B.

4) **Refusal Definitions**: Parent/Patient Refusal in Immunization package or PCC Refusal type REF or NMI for IZ codes: MMR: 3, 94; M/R: 4; R/M: 38; Measles: 5; Mumps: 7; Rubella: 6; Hepatitis B: 8, 42-45, 51, 102, 104, 110; Varicella: 21, 94; Tdap: 115; Td: 9, 113; Meningococcal: 32, 108, 114, HPV: 62, 118.

5) **Immunization Definitions**:

A) **MMR**:
   1) Immunization (CVX) codes: 3, 94;
   2) POV V06.4;
   3) CPT: 90707, 90710;

**MMR contraindication definitions**: POV: 279, V08, 042, 200-202, 203.0, 203.1, 203.8, 204-208; or Immunization Package contraindication of “Anaphylaxis,” “Immune Deficiency,” “Immune Deficient,” or “Neomycin Allergy.”

B) **M/R**:
   1) 1) Immunization (CVX) code 4;
   2) 2) CPT 90708.

**M/R contraindication definition**: 1) Immunization Package contraindication of “Anaphylaxis.”
C) R/M:
1) Immunization (CVX) code 38;
2) 2) CPT 90709 (old code).

**R/M contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”

D) Measles:
1) Immunization (CVX) code 5;
2) POV V04.2;
3) CPT 90705;
4) Procedure 99.45.

**Measles evidence of disease definition:** POV or PCC Problem List (active or inactive) 055*.

**Measles contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”

E) Mumps:
1) Immunization (CVX) code 7;
2) POV V04.6;
3) CPT 90704;
4) Procedure 99.46.

**Mumps evidence of disease definition:** POV or PCC Problem List (active or inactive) 072*.

**Mumps contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”

F) Rubella:
1) Immunization (CVX) code 6;
2) POV V04.3;
3) CPT 90706;
4) Procedure 99.47.

**Rubella evidence of disease definitions:** POV or PCC Problem List (active or inactive) 056*, 771.0.

**Rubella contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”
G) Hepatitis B:
   1) Immunization (CVX) codes: 8, 42-45, 51, 102, 104, 110;
   2) CPT: 90636, 90723, 90731 (old code), 90740, 90743-90748, G0010, Q3021, Q3023.

   **Hepatitis B evidence of disease definitions:** POV or PCC Problem List (active or inactive): V02.61, 070.2, 070.3.

   **Hepatitis B contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”

H) Varicella:
   1) Immunization (CVX) codes: 21, 94;
   2) POV V05.4; 3) CPT: 90710, 90716.

   **Varicella evidence of disease definitions:** 1) POV or PCC Problem List (active or inactive) 052*, 053* or 2) Immunization Package contraindication of “Hx of Chicken Pox” or “Immune.”

   **Varicella contraindication definitions:** POV: 279, V08, 042, 200-202, 203.0, 203.1, 203.8, 204-208; or Immunization Package contraindication of “Anaphylaxis,” “Immune Deficiency,” “Immune Deficient,” or “Neomycin Allergy.”

I) Tdap:
   1) Immunization (CVX) code: 115;
   2) CPT 90715.

   **Tdap contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”

J) Td:
   1) Immunization (CVX) code 9, 113;
   2) POV V06.5;
   3) CPT 90714, 90718.

   **Td contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”

K) Meningococcal:
   1) Immunization (CVX) codes: 32, 108, 114;
   2) CPT 90733, 90734.

   **Meningococcal contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”
L) **HPV:**

1) Immunization (CVX) codes: 62, 118; 2) CPT 90649, 90650.

**HPV contraindication definition:** 1) Immunization Package contraindication of “Anaphylaxis.”

**Patient List Options**

1) List of Active Clinical patients 13-17 with 1:3:2:1 combination (i.e., 1 Td/Tdap, 3 Hepatitis B, 2 MMR, 1 Varicella).

2) List of Active Clinical patients 13-17 without 1:3:2:1 combination (i.e., 1 Td/Tdap, 3 Hepatitis B, 2 MMR, 1 Varicella). If a patient did not have all doses in a multiple dose vaccine, the IZ will not be listed. For example, if a patient only had 2 Hep B, no IZ will be listed for Hep B.

3) List of Active Clinical patients 13-17 with 1 Tdap ever.

4) List of Active Clinical patients 13-17 without 1 Tdap ever.

5) List of Active Clinical patients 13-17 with 1 Meningococcal ever.

6) List of Active Clinical patients 13-17 without 1 Meningococcal ever.

7) List of female Active Clinical patients 13-17 with 3 doses of HPV ever.

8) List of female Active Clinical patients 13-17 without 3 doses of HPV ever. If a patient did not have all doses, the IZ will not be listed.
2.4 Cancer Screen Group

2.4.1 Tobacco Cessation

No Changes from Version 8.0 Patch 3.

Note: The performance measure logic included in this report for Tobacco Cessation is different from the logic included in the National GPRA & PART Report and the Selected Measures Report. The logic in this report is developmental GPRA logic and may be used as the future GPRA logic after data analysis is performed. This logic is included only in the ONM Report.

Owner/Contact
Mary Wachacha & Chris Lamer, PharmD/Epidemiology Program, Dr. Nat Cobb

Denominators
1) Active Clinical patients identified as current tobacco users or tobacco users in cessation, broken out by age groups and gender.
2) User Population patients identified as current tobacco users or tobacco users in cessation, broken out by gender.

Numerators
1) Patients who have received or refused tobacco cessation counseling or received a prescription for a smoking cessation aid anytime during the period 180 days prior to the Report Period through the end of the Report Period.
2) Patients identified as having quit their tobacco use anytime during the period 180 days prior to the Report Period.
   A) Patients who refused tobacco cessation counseling.
3) Patients identified as having quit their tobacco use anytime during the period 180 days prior to the Report Period.
   A) Patients whose tobacco use was in cessation and are considered to have quit.
4) Patients who received or refused tobacco cessation counseling, received a prescription for a tobacco cessation aid, or quit their tobacco use anytime during the period 180 days prior to the Report Period.

Definitions
1) Current Tobacco Users or Tobacco Users in Cessation:
   A) CRS will search first for the last (i.e., most recent) health factor documented during the period 180 days prior to the Report Period through the first 180 days of the Report Period.
i) If a health factor(s) is found and at least one of them is one of the health factors listed below, the patient is counted as a tobacco user in cessation and is also counted as having quit their tobacco use. The patient is not counted as receiving cessation counseling.

   Cessation-Smoker
   Cessation-Smokeless

ii) If a health factor(s) is found and at least one of them is one of the health factors listed below, the patient is counted as a tobacco user:

   Tobacco User Health Factors (TUHFs)

   ----------------------------------------------
   Current Smoker
   Current Smokeless
   Current Smoker and Smokeless

iii) If a health factor is found and it is NOT a TUHF, CRS will then search for CPT 1034F or 1035F documented after the health factor. If one of these codes is found, the patient will be considered a tobacco user. If one of these codes is not found, the patient is considered a non-tobacco user and will not be included in the denominator.

B) If no health factor was found during the specified timeframe, CRS will then search for the most recent health factor documented during an EXPANDED timeframe of anytime prior to the report period through the first 180 days of the report period. For example, a patient with the most recent health factor being documented five years prior to the report period.

   If multiple health factors were documented on the same date and if any of them are TUHFs, all of the health factors will be considered as TUHFs.

   i) If a health factor is found during the expanded timeframe and it is not one of the TUHFs, CRS will then search for CPT 1034F or 1035F documented after the health factor. If one of these codes is found, the patient will be considered a tobacco user. If one of these codes is not found, the patient is considered a non-tobacco user and will not be included in the denominator.

   ii) If a health factor is found during the expanded timeframe and is a TUHF, CRS will then search for POV or current Active Problem List diagnosis code 305.13 Tobacco use in remission (old code) or V15.82 with a date occurring after the health factor date and through the first 180 days of the report period. If one of these diagnoses is found, the patient will be considered as having quit their tobacco use and will not be included in the denominator. If a diagnosis is not found, the patient is included as a current tobacco user and will be included in the denominator.

C) If no health factor was found, CRS will then search for any of the following codes documented during the period 180 days prior to the Report Period through the first 180 days of the Report Period:
i) Tobacco-related POV or active Problem List diagnoses 305.1, 305.10-305.12 (old codes), or 649.00-649.04.

ii) CPT 99406, 99407, G0375 (old code), G0376 (old code), 1034F or 1035F. If any of these codes are found, the patient will be considered a tobacco user. If one of these codes is not found, the patient is considered a non-tobacco user and will not be included in the denominator.

2) **Tobacco Cessation Counseling:** Any of the following documented anytime during the period 180 days prior to the Report Period through the end of the Report Period.
   A) Patient Education codes containing "TO-", "-TO", "-SHS", 305.1, 305.1* (old codes), or 649.00-649.04
   B) Clinic Code 94 (tobacco cessation clinic)
   C) Dental Code 1320
   D) CPT code 99406, 99407, G0375 (old code), G0376 (old code), or 4000F;
   E) Documented refusal of patient education codes containing "TO-", "-TO", or "-SHS". Refusals will only be counted if a patient did not receive counseling or a prescription for tobacco cessation aid.

3) **Prescription for Tobacco Cessation Aid:** Any of the following documented anytime during the period 180 days prior to the Report Period through the end of the Report Period:
   A) Prescription for medication in the site-populated BGP CMS SMOKING CESSATION MEDS taxonomy.
   B) Prescription for any medication with name containing “NICOTINE PATCH”, “NICOTINE POLACRILEX”, “NICOTINE INHALER”, or “NICOTINE NASAL SPRAY”.
   C) CPT 4001F.

4) **Quit Tobacco Use:** Any of the following documented anytime during the period 180 days prior to the Report Period through the end of the Report Period AND after the date of the code found indicating the patient was a current tobacco user.
   A) POV or current Active Problem List diagnosis code 305.13 Tobacco use in remission (old code) or V15.82.
   B) Health Factor (looks at the last documented health factor): Previous Smoker, Previous Smokeless.

**Patient List Options**
1) List of tobacco users with documented tobacco cessation intervention or refusal.
2) List of tobacco users without documented tobacco cessation intervention or refusal.
3) List of tobacco users who quit tobacco use.
4) List of tobacco users and tobacco users in cessation with documented tobacco intervention or refusal or who quit tobacco use.
5) List of tobacco users and tobacco users in cessation without documented tobacco cessation intervention or refusal or who did not quit their tobacco use.
2.5 Behavioral Health Group

2.5.1 Alcohol Screening and Brief Intervention (ASBI) in the ER

No changes from Version 8.0 Patch 3.

Owner/Contact
Drs. David Boyd and Peter Stuart

Denominators

1) Number of visits for Active Clinical patients age 15-34 seen in the ER for injury during the Report Period.
2) Number of visits for Active Clinical patients age 15-34 seen in the ER for injury and screened positive for hazardous alcohol use during the Report Period.
3) Number of visits for User Population patients age 15-34 seen in the ER for injury during the Report Period.
4) Number of visits for User Population patients age 15-34 seen in the ER for injury and screened positive for hazardous alcohol use during the Report Period.

Numerators

1) Number of visits where patients were screened in the ER for hazardous alcohol use.
   A) Number of visits where patients were screened positive.
2) Number of visits where patients were provided a brief negotiated interview (BNI) at or within 7 days of the ER visit (used with denominators #2 and #4).
   A) Number of visits where patients were provided a BNI at the ER visit.
   B) Number of visits where patients were provided a BNI not at the ER visit but within 7 days of the ER visit.

Denominator and Numerator Logic:

If a patient has multiple ER visits for injury during the Report Period, each visit will be counted in the denominator. For the screening numerator, each ER visit with injury at which the patient was screened for hazardous alcohol use will be counted. For the positive alcohol use screen numerator, each ER visit with injury at which the patient screened positive for hazardous alcohol use will be counted. For the BNI numerators, each visit where the patient was either provided a BNI at the ER or within 7 days of the ER visit will be counted.
An example of this logic is shown in the following table.

<table>
<thead>
<tr>
<th>ER Visit w/Injury</th>
<th>Denom Count</th>
<th>Scm Num</th>
<th>Post Scm Num Count</th>
<th>BNI Num Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Doe, 07/17/08, Screened Positive at ER, BNI at ER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Doe, 09/01/08, Screened Positive at ER, No BNI</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>John Doe, 11/15/08, No Screen</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counts:</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Definitions

1) **Emergency Room (ER) Visit**: Clinic code 30.
2) **Injury**: Primary or secondary POV 800.0–999.9 or E800.0-E989.
3) **ER Screening for Hazardous Alcohol Use**: Any of the following conducted during the ER visit:
   A) PCC exam code 35,
   B) Any Alcohol Health Factor (i.e., CAGE),
   C) POV V79.1 Screening for Alcoholism,
   D) CPT G0396, G0397, H0050, 99408, or 99409, or
   E) Measurement in PCC AUDT, AUDC, or CRFT.
4) **Positive Screen for Hazardous Alcohol Use**: Any of the following for the screening performed at the ER visit:
   A) Exam Code 35 Alcohol Screening result of “Positive,”
   B) Health factor of CAGE result of 1/4, 2/4, 3/4 or 4/4, or
   C) CPT G0396, G0397, 99408, or 99409, or
   D) AUDT result of =>8, AUDC result of =>4 for men and =>3 for women, CRFT results of 2-6.
5) **Brief Negotiated Interview (BNI)**: Any of the following documented at the ER visit or within 7 days of the ER visit at a face-to-face visit, which excludes chart reviews and telecommunication visits:
   A) CPT G0396, G0397, H0050, 99408, or 99409, or
   B) Patient education code AOD-INJ.
Patient List Options

1) Patients 15-34 seen in the ER for injury who were screened for hazardous alcohol use.
2) Patients 15-34 seen in the ER for injury who were not screened for hazardous alcohol use.
3) Patients 15-34 seen in the ER for injury with positive alcohol screen who received a BNI.
4) Patients 15-34 seen in the ER for injury with positive alcohol screen who did not receive a BNI.
2.5.2 Depression Screening

No changes from Version 8.0 Patch 3.

Owner>Contact
Denise Grenier, LCSW and Drs. David Sprenger and Peter Stuart

Denominator
Active Diabetes patients, defined as: all Active Clinical patients diagnosed with diabetes prior to the Report Period, AND at least 2 visits during the Report Period, AND 2 DM-related visits ever. Broken out by gender.

Numerators
1) Patients screened for depression or diagnosed with mood disorder at any time during the Report Period, including documented refusals in past year.
   A) Patients screened for depression during the Report Period.
   B) Patients with a diagnosis of a mood disorder during the Report Period.
   C) Patients with documented refusal in past year.
2) Patients with depression-related education or refusal of education in past year.

Definitions
1) Diabetes: POV 250.00-250.93
2) Ischemic Heart Disease: 410.0-412.*, 414.0-414.9, 428.*, 429.2 recorded in the V POV file.
3) Depression Screening: Any of the following:
   A) Exam Code 36,
   B) POV V79.0,
   C) BHS problem code 14.1 (screening for depression), or
   D) V Measurement in PCC or BH of PHQ2 or PHQ9.
4) Mood Disorders: At least two visits in PCC or BHS during the Report period with POV for: Major Depressive Disorder, Dysthymic Disorder, Depressive Disorder NOS, Bipolar I or II Disorder, Cyclothymic Disorder, Bipolar Disorder NOS, Mood Disorder Due to a General Medical Condition, Substance-induced Mood Disorder, or Mood Disorder NOS. These POV codes are: 296.*, 291.89, 292.84, 293.83, 300.4, 301.13, or 311 or BHS POV 14 or 15.
5) Screening Refusal: Any PCC refusal in past year with Exam Code 36.
6) Depression-related patient education or refusal: Any of the following during the Report Period:
   A) Patient education codes containing “DEP-” (depression), 296.2* or 296.3*, “BH-” (behavioral and social health), 290-319, 995.5*, or 995.80-995.85, “SB-” (suicidal behavior) or 300.9, or “PDEP-” (postpartum depression) or 648.44; or
B) Refusal of patient education codes containing “DEP-”, “BH-”, “SB-” or “PDEP-.”

**Patient List Options**

1) List of Active Diabetic patients screened for depression/diagnosed with mood disorder.

2) List of Active Diabetic patients not screened for depression/diagnosed with mood disorder.
2.6 Cardiovascular Disease Related Group

2.6.1 Cardiovascular Disease and Cholesterol Screening

Changes from Version 8.0 Patch 3 noted below.

Owner/Contact
Dr. Eric Brody/ Mary Wachacha & Chris Lamer, PharmD

Denominator
Active Clinical patients ages 23 and older.

Numerator
Patients with documented blood total cholesterol screening any time during past five years, regardless of result.

Definitions
1) Total Cholesterol Panel: Searches for most recent cholesterol test with a result during the Report Period. *If more than one cholesterol test is found on the same day and/or the same visit and one test has a result and the other does not, the test with the result will be used. If a cholesterol test with a result is not found, CRS searches for the most recent cholesterol test without a result.* Total Cholesterol definition: CPT 82465; LOINC taxonomy; site-populated taxonomy DM AUDIT CHOLESTEROL TAX.

Patient List Options
1) List of Active Clinical patients 23+ screened for total cholesterol in past 5 years.
2) List of Active Clinical patients 23+ not screened for total cholesterol in past 5 years.
2.6.2 Cardiovascular Disease and Blood Pressure Control

No changes from Version 8.0 Patch 3.

Owner/Contact
Dr. Eric Brody/ Mary Wachacha & Chris Lamer, PharmD

Denominators
1) All Active Clinical patients ages 20 and over.
2) Active IHD patients, defined as all Active Clinical patients diagnosed with ischemic heart disease (IHD) prior to the Report Period, AND at least 2 visits during the Report Period, AND 2 IHD-related visits ever.

Numerators
1) Patients with BP values documented.
   A) Patients with normal BP, <120/80.
   B) Pre-hypertension I, => 120/80 and < 130/80.
   C) Pre-hypertension II, =>130/80 and < 140/90.
   D) Stage 1 hypertension, => 140/90 and <160/100.
   E) Stage 2 hypertension, => 160/100.

Definitions
1) BP Values (all numerators): CRS uses mean of last 3 Blood Pressures documented on non-ER visits in the past two years. If 3 BPs are not available, uses the mean of last 2 non-ER BPs. If a visit contains more than 1 BP, the lowest BP will be used, defined as having the lowest systolic value. The mean Systolic value is calculated by adding the last 3 (or 2) systolic values and dividing by 3 (or 2). The mean Diastolic value is calculated by adding the diastolic values from the last 3 (or 2) blood pressures and dividing by 3 (or 2). If the systolic and diastolic values do not BOTH meet the current category, then the value that is least controlled determines the category. For the BP documented numerator only, if CRS is not able to calculate a mean BP, it will search for CPT 3074F-3080F documented on a non-ER visit during the Report Period.

2) Ischemic Heart Disease (IHD): 410.0-412.*, 414.0-414.9, 428.*, or 429.2 recorded in the V POV file.

Patient List Options
1) List of Active Clinical patients =>20 or who have IHD who had their BP assessed twice in past two years.
2) List of Active Clinical patients =>20 or who have IHD who have not had their BP assessed twice in past two years.
3) List of Active Clinical patients =>20 or who have IHD who have normal BP (<120/80).
4) List of Active Clinical patients =>20 or who have IHD who have uncontrolled BP (=>120/80).
2.6.3 **Appropriate Medication Therapy after a Heart Attack**

Changes from Version 8.0 Patch 3 noted below.

**Owner/Contact**
Dr. Eric Brody/ Mary Wachacha & Chris Lamer, PharmD

**Denominator**
Active Clinical patients 35 and older discharged for an AMI during the first 51 weeks of the Report period and were not readmitted for any diagnosis within seven days of discharge.

**Numerators**
1) Patients with active prescription for, refusal of, or who have a contraindication/previous adverse reaction to beta-blockers.
2) Patients with active prescription for, refusal of, or who have a contraindication/previous adverse reaction to ASA (aspirin) or other anti-platelet agent.
3) Patients with active prescription for, refusal of, or who have a contraindication/previous adverse reaction to ACEIs/ARBs.
4) Patients with active prescription for, refusal of, or who have a contraindication/previous adverse reaction to statins.
5) Patients with active prescriptions for all post-AMI medications (i.e., beta-blocker, ASA/anti-platelet, ACEI/ARB, AND statin), with refusal, and/or who have a contraindication/previous adverse reaction.

**Definitions**
1) **Acute Myocardial Infarction (AMI):** POV 410.*1 (i.e., first eligible episode of an AMI) with Service Category H. If patient has more than one episode of AMI during the first 51 weeks of the Report period, CRS will include only the first discharge.
2) **ALT:** Site-populated taxonomy DM AUDIT ALT TAX or LOINC taxonomy.
3) **AST:** Site-populated taxonomy DM AUDIT AST TAX or LOINC taxonomy.
4) **Creatine Kinase:** Site-populated taxonomy BGP CREATINE KINASE TAX or LOINC taxonomy.

**Denominator Exclusions:** Patients meeting any of the following conditions will be excluded from the denominator.

1) Patients with Discharge Type of Irregular (AMA), Transferred, or contains “Death.”
2) Patients readmitted for any diagnosis within seven days of discharge.
3) Patients with a Diagnosis Modifier of C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable), R (Resolved), S (Suspect, Suspicious), or T (Status Post).

4) Patients with a Provider Narrative beginning with “Consider”; “Doubtful”; “Maybe”; “Possible”; “Perhaps”; “Rule Out”; “R/O”; “Probable”; “Resolved”; “Suspect”; “Suspicious”; or “Status Post.”

To be included in the numerators, a patient must meet one of the 3 conditions below:

1) An active prescription (not discontinued as of [discharge date + 7 days]) that was prescribed prior to admission, during the inpatient stay, or within seven days after discharge. “Active” prescription defined as: Days Prescribed > ((Discharge Date + 7 days) - Order Date); OR

2) A refusal of the medication at least once during hospital stay through 7 days after discharge date; OR

3) Have a contraindication/previous adverse reaction to the indicated medication. Refusals and contraindications/previous adverse drug reactions (ADR)/allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a refusal and/or contraindication/ADR/allergy will be counted in sub-numerators B-C. Because a patient may have both a refusal and a contraindication/ADR/allergy, the sub-numerator totals of A-C may not add up to the numerator total.

Note: If the medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example: Rx Date=11/15/2003, Discontinued Date=11/19/2003, Recalculated # Days Prescribed=4.

Numerator Logic: In the logic below, “ever” is defined as anytime through the end of the Report Period.

Beta-Blocker Numerator Logic:

Beta-blocker medication codes defined with medication taxonomy BGP HEDIS BETA BLOCKER MEDS. (Medications are: Noncardioselective Beta Blockers: Carvedilol, Labetalol, Nadolol, Penbutolol, Pindolol, Propranolol, Timolol, Sotalol; Cardioselective Beta Blockers: Acebutolol, Atenolol, Betaxolol, Bisoprolol, Metoprolol, Nebivolol; and Antihypertensive Combinations: Atenolol-chlorthalidone, Bendroflumethiazide-nadolol, Bisoprolol-hydrochlorothiazide, Hydrochlorothiazide-metoprolol, Hydrochlorothiazide-propranolol, and Hydrochlorothiazide-timolol.) (Updated list of medications.)

Refusal of beta-blocker: REF refusal of any beta-blocker medication in site-populated medication taxonomy BGP HEDIS BETA BLOCKER MEDS at least once during hospital stay through 7 days after discharge date.
Contraindications to beta-blockers defined as any of the following occurring ever unless otherwise noted:

A) Asthma - 2 diagnoses (POV) of 493* on different visit dates;
B) Hypotension - 1 diagnosis of 458*;
C) Heart block >1 degree - 1 diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, or 426.7;
D) Sinus bradycardia - 1 diagnosis of 427.81;
E) COPD - 2 diagnoses on different visit dates of 491.2*, 496, or 506.4, or a combination of any of these codes, such as 1 visit with 491.20 and 1 with 496;
F) NMI (not medically indicated) refusal for any beta-blocker at least once during hospital stay through 7 days after discharge date; or
G) CPT G8011 (Clinician documented that AMI patient was not an eligible candidate for beta-blocker at arrival) at least once during hospital stay through 7 days after discharge date.

Adverse drug reaction/document beta blocker allergy defined as any of the following occurring ever:

A) POV 995.0-995.3 AND E942.0;
B) “beta block*” entry in ART (Patient Allergies File); or
C) “beta block*”, “bblock*” or “b block*” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

ASA (aspirin)/Other Anti-Platelet Numerator Logic:

ASA medication codes defined with medication taxonomy DM AUDIT ASPIRIN DRUGS.

Other anti-platelet medication codes defined with medication taxonomy site-populated BGP ANTI-PLATELET DRUGS taxonomy.

Refusal of ASA/other anti-platelet: REF refusal of any ASA or anti-platelet medication in site-populated medication taxonomies DM AUDIT ASPIRIN DRUGS or BGP ANTI-PLATELET DRUGS at least once during hospital stay through 7 days after discharge date.

Contraindications to ASA/other anti-platelet defined as any of the following occurring ever unless otherwise noted:

A) Patients with active prescription for Warfarin/Coumadin at time of arrival or prescribed at discharge, using site-populated BGP CMS WARFARIN MEDS taxonomy;
B) Hemorrhage diagnosis (POV 459.0);
C) NMI (not medically indicated) refusal for any aspirin at least once during hospital stay through 7 days after discharge date; or
D) CPT G8008 (Clinician documented that AMI patient was not an eligible
candidate to receive aspirin at arrival) at least once during hospital stay
through 7 days after discharge date.

**Adverse drug reaction/documentated ASA/other anti-platelet allergy** defined as
any of the following occurring ever:

A) POV 995.0-995.3 AND E935.3;
B) “aspirin” entry in ART (Patient Allergies File); or
C) “ASA” or “aspirin” contained within Problem List or in Provider Narrative
field for any POV 995.0-995.3 or V14.8.

**ACEI/ARB Numerator Logic:**
Ace Inhibitor (ACEI) medication codes defined with medication taxonomy BGP
HEDIS ACEI MEDS. ACEI medications are: *Angiotensin Converting Enzyme
Inhibitors* (Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril,
Perindopril, Quinapril, Ramipril, Trandolopril).

**Antihypertensive Combinations (Amlodipine-benazepril, Benazepril-
hydrochlorothiazide, Captopril-hydrochlorothiazide, Enalapril-
hydrochlorothiazide, Fosinopril-hydrochlorothiazide, Hydrochlorothiazide-
lisinopril, Hydrochlorothiazide-moexipril, Hydrochlorothiazide-quinapril,
Hydrochlorothiazide-verapamil).**
(DELETE: ACEI-Combination Products: Amlodipine-benazepril (Lotrel),
Benazepril + HCTZ (Lotensin HCT), Captopril + HCTZ (Capozide,
Hydrochlorothiazide + Capoopril), Enalapril + HCTZ (Vaseretic), Enalapril-
felodipine (Lexxel), Enalapril-diltiazem (Teczem), Fosinopril + HCTZ (Monopril
HCT), Lisinopril + HCTZ (Prinzide, Zestoreti, Hydrochlorothiazide + Lisinopril),
Moexipril + HCTZ (Uniretic), Quinapril + HCTZ (Accuretic, Quinaretic)).

**Refusal of ACEI:** REF refusal of any ACE Inhibitor medication in site-populated
medication taxonomy BGP HEDIS ACEI MEDS at least once during hospital stay
through 7 days after discharge date.

**Contraindications to ACEI** defined as any of the following:

1) Diagnosis ever for moderate or severe aortic stenosis (POV 395.0, 395.2,
396.0, 396.2, 396.8, 424.1, 425.1, or 747.22) or
2) NMI (not medically indicated) refusal for any ACEI at least once during
hospital stay through 7 days after discharge date.

**Adverse drug reaction/documentated ACEI allergy** defined as any of the following
occurring ever:

1) POV 995.0-995.3 AND E942.6;
2) “ace inhibitor” or “ACEI” entry in ART (Patient Allergies File); or
3) “ace i*” or “ACEI” contained within Problem List or in Provider Narrative
field for any POV 995.0-995.3 or V14.8.
ARB (Angiotensin Receptor Blocker) medication codes defined with medication taxonomy BGP HEDIS ARB MEDS. ARB medications: Angiotensin II Inhibitors (Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan.)


(DELETED: ARB Combination Products: Candesartan + HCTZ (Atacand HCT), Eprosartan + HCTZ (Teveten HCT), Irbesartan + HCTZ (Avalide HCT), Losartan + HCTZ (Hyzaar HCT), Olmesartan + HCTZ (Benicar HCT), Telmisartan + HCTZ (Micardis HCT), Valsartan + HCTZ (Diovan HCT)).

Refusal of ARB: REF refusal of any ARB medication in site-populated medication taxonomy BGP HEDIS ARB MEDS at least once during hospital stay through 7 days after discharge date.

Contraindications to ARB defined as any of the following:
1. Diagnosis ever for moderate or severe aortic stenosis (POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22) or
2. NMI (not medically indicated) refusal for any ARB at least once during hospital stay through 7 days after discharge date.

Adverse drug reaction/document ARB allergy defined as any of the following occurring ever:
1. POV 995.0-995.3 AND E942.6;
2. “Angiotensin Receptor Blocker” or “ARB” entry in ART (Patient Allergies File); or
3. “Angiotensin Receptor Blocker” or “ARB” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

Statins Numerator Logic:
Statins medication codes defined with medication taxonomy BGP HEDIS STATIN MEDS. Statin medications: Atorvostatin (Lipitor), Fluvastatin (Lescol), Lovastatin (Altocor), Mevacor, Pravastatin (Pravachol), Simvastatin (Zocor), Rosuvastatin (Crestor).

Statin Combination Products: Advicor, Caduet, PraviGard Pac, Vytorin.

Refusal of Statin: REF refusal of any statin medication in site-populated medication taxonomy BGP HEDIS STATIN MEDS at least once during hospital stay through 7 days after discharge date.

Contraindications to Statins defined as any of the following:
1) Pregnancy, defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0-V23.9, V72.42, 640.*-649.*, 651.*-676.*) and with no documented miscarriage or abortion occurring after the second pregnancy POV. *For pregnancy definition, (1) revised logic from looking for the last two pregnancy diagnoses during the Report Period to the first two diagnoses during the Report Period. (2) Corrected logic to look for an abortion/miscarriage after the second pregnancy diagnosis. Previously, the logic was looking after the date of the first pregnancy diagnosis it found (which represented the patient's next to last diagnosis).* Mis
carriage definition: (1) POV: 630, 631, 632, 633*, 634*,
(2) CPT 59812, 59820, 59821, 59830.
Abortion definition: (1) POV: 635*, 636* 637*,
(2) CPT: 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850,
59851, 59852, 59855, 59856, 59857, S2260-S2267,
(3) Procedure: 69.01, 69.51, 74.91, 96.49;
3) Acute Alcoholic Hepatitis, defined as POV 571.1 during the Report Period, or
4) NMI (not medically indicated) refusal for any statin at least once during hospital stay through 7 days after discharge date.
Adverse drug reaction/documentated statin allergy defined as any of the following:
1) ALT and/or AST > 3x the Upper Limit of Normal (ULN) (i.e., Reference High) on 2 or more consecutive visits during the Report Period;
2) Creatine Kinase (CK) levels > 10x ULN or CK > 10,000 IU/L during the Report Period;
3) Myopathy/Myalgia, defined as any of the following during the Report Period:
POV 359.0-359.9, 729.1, 710.5, or 074.1;
4) any of the following occurring ever:
A) POV 995.0-995.3 AND E942.9;
B) “Statin” or “Statins” entry in ART (Patient Allergies File); or
C) “Statin” or “Statins” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

**All Medications Numerator Logic:**
To be included in this numerator, a patient must have a prescription, refusal, or a contraindication for ALL of the four medication classes (i.e., beta-blocker, ASA/other anti-platelet, ACEI/ARB, AND statin).

**Patient List Options**
1) List of Active Clinical patients =>35 discharged for AMI with beta-blocker therapy.
2) List of Active Clinical patients =>35 discharged for AMI without beta-blocker therapy.
3) List of Active Clinical patients =>35 discharged for AMI with ASA therapy.
4) List of Active Clinical patients =>35 discharged for AMI without ASA therapy.
5) List of Active Clinical patients =>35 discharged for AMI with ACEI/ARB therapy.
6) List of Active Clinical patients =>35 discharged for AMI without ACEI/ARB therapy.
7) List of Active Clinical patients =>35 discharged for AMI with statin therapy.
8) List of Active Clinical patients =>35 discharged for AMI without statin therapy.
9) List of Active Clinical patients =>35 discharged for AMI with all appropriate medications.
10) List of Active Clinical patients =>35 discharged for AMI without all appropriate medications.
2.6.4 Persistence of Appropriate Medication Therapy after a Heart Attack

Changes from Version 8.0 Patch 3 noted below.

Owner/Contact
Dr. Eric Brody/Mary Wachacha & Chris Lamer, PharmD

Denominator
Active Clinical patients 35 and older diagnosed with an AMI six months prior to the Report period through the first six months of the Report period.

Numerators

1) Patients with a 135-day course of treatment with beta-blockers, who refused beta-blockers in the 180 days after AMI, or who have a contraindication/previous adverse reaction to beta-blocker therapy.

2) Patients with a 135-day course of treatment with ASA (aspirin) or other anti-platelet agent, who refused ASA/anti-platelet in the 180 days after AMI, or who have a contraindication/previous adverse reaction to ASA/anti-platelet therapy.

3) Patients with a 135-day course of treatment with ACEIs/ARBs, who refused ACEIs/ARBs in the 180 days after AMI, or who have a contraindication/previous adverse reaction to ACEI/ARB therapy.

4) Patients with a 135-day course of treatment with statins, who refused statins in the 180 days after AMI, or who have a contraindication/previous adverse reaction to statin therapy.

5) Patients with a 135-day course of treatment for all post-AMI medications (i.e., beta-blocker, ASA/anti-platelet, ACEI/ARB, AND statin) following first discharge date or visit date, including previous active prescriptions; with refusal, and/or who have a contraindication/previous adverse reaction.

Definitions

1) Acute Myocardial Infarction (AMI): POV or Problem List 410.0*-410.9* or 412. AMI diagnosis may be made at an inpatient or outpatient visit but must occur between six months prior to beginning of Report period through first six months of the Report period. Inpatient visit defined as Service Category of H (Hospitalization). If patient has more than one episode of AMI during the timeframe, CRS will include only the first hospital discharge or ambulatory visit.

2) ALT: Site-populated taxonomy DM AUDIT ALT TAX or LOINC taxonomy.

3) AST: Site-populated taxonomy DM AUDIT AST TAX or LOINC taxonomy.

4) Creatine Kinase: Site-populated taxonomy BGP CREATINE KINASE TAX or LOINC taxonomy.

Denominator Exclusions: Patients meeting any of the following conditions will be excluded from the denominator.
1) If inpatient visit, patients with Discharge Type of Irregular (AMA), Transferred, or contains “Death.”

2) Patients with a Diagnosis Modifier of C (Consider), D (Doubtful), M (Maybe, Possible, Perhaps), O (Rule Out), P (Probable), R (Resolved), S (Suspect, Suspicious), or T (Status Post).

3) Patients with a Provider Narrative beginning with “Consider”; “Doubtful”; “Maybe”; “Possible”; “Perhaps”; “Rule Out”; “R/O”; “Probable”; “Resolved”; “Suspect”; “Suspicious”; or “Status Post.”

To be included in the numerators, a patient must meet one of the 3 conditions below:

1) A total days’ supply >= 135 days in the 180 days following discharge date for inpatient visits or visit date for ambulatory visits. Prior active prescriptions can be included if the treatment days fall within the 180 days following discharge/visit date. Prior active prescription defined as most recent prescription (see codes below) prior to admission/visit date with the number of days supply equal to or greater than the discharge/visit date minus the prescription date; OR

2) A refusal of the medication at least once at time of diagnosis through the 180 days after AMI; OR

3) Have a contraindication/previous adverse reaction to the indicated medication. Refusals and contraindications/previous adverse drug reactions (ADR)/allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a refusal and/or contraindication/ADR/allergy will be counted in sub-numerators B-C. Because a patient may have both a refusal and a contraindication/ADR/allergy, the sub-numerator totals of A-C may not add up the to the numerator total.

Note: If the medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example: Rx Date=11/15/2003, Discontinued Date=11/19/2003, Recalculated # Days Prescribed=4.

Example of patient included in the beta-blocker numerator who has prior active prescription:

- Admission Date: 2/1/2004, Discharge Date: 2/15/2004
- Must have 135 days prescribed by 8/13/2004 (Discharge Date+180)
- Prior Beta-Blocker Rx Date: 1/15/2004
- # Days Prescribed: 60 (treats patient through 3/15/2004)
- Discharge Date minus Rx Date: 2/15/2004-1/15/2004 = 31, 60 is >= 31, prescription is considered Prior Active Rx
- 3/15/2004 is between 2/15 and 8/13/2004, thus remainder of Prior Active Rx can be counted toward 180-day treatment period
- # Remaining Days Prescribed from Prior Active Rx:
  \(60-(\text{Discharge Date-Prior Rx Date}) = 60-(2/15/2004-1/15/2004) = 60-31 = 29\)
- Rx #2: 4/1/2004, # Days Prescribed: 90
- Rx #3: 7/10/2004, #Days Prescribed: 90
- Total Days Supply Prescribed between 2/15 and 8/13/2004: 29+90+90=209

Numerator Logic: In the logic below, "ever" is defined as anytime through the end of the Report Period.

**Beta-Blocker Numerator Logic:**

**Beta-blocker medication codes** defined with medication taxonomy BGP HEDIS BETA BLOCKER MEDS. *(Medications are: Noncardioselective Beta Blockers: Carteolol, Carvedilol, Labetalol, Nadolol, Penbutolol, Pindolol, Propranolol, Timolol, Sotalol; Cardioselective Beta Blockers: Acebutolol, Atenolol, Betaxolol, Bisoprolol, Metoprolol, Nebivolol; and Antihypertensive Combinations: Atenolol-chlorothalidone, Bendroflumethiazide-nadolol, Bisoprolol-hydrochlorothiazide, Hydrochlorothiazide-metoprolol, Hydrochlorothiazide-propranolol, and Hydrochlorothiazide-timolol.)* *(Updated list of medications.)*

**Refusal of beta-blocker:** REF refusal of any beta-blocker medication in site-populated medication taxonomy BGP HEDIS BETA BLOCKER MEDS at least once during the period admission/visit date through the 180 days after discharge/visit date.

**Contraindications to beta-blockers** defined as any of the following occurring ever unless otherwise noted:

A) Asthma - 2 diagnoses (POV) of 493* on different visit dates;
B) Hypotension - 1 diagnosis of 458*;
C) Heart block >1 degree - 1 diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, or 426.7;
D) Sinus bradycardia - 1 diagnosis of 427.81;
E) COPD - 2 diagnoses on different visit dates of 491.2*, 496, or 506.4, or a combination of any of these codes, such as 1 visit with 491.20 and 1 with 496;
F) NMI (not medically indicated) refusal for any beta-blocker at least once during the period admission/visit date through the 180 days after discharge/visit date; or
G) CPT G8011 (Clinician documented that AMI patient was not an eligible candidate for beta-blocker at arrival) at least once during the period admission/visit date through the 180 days after discharge/visit date.

**Adverse drug reaction/document beta blocker allergy** defined as any of the following occurring anytime up to the 180 days after discharge/visit date:

A) POV 995.0-995.3 AND E942.0;
B) “beta block*” entry in ART (Patient Allergies File); or C) “beta block*”, “bblock*” or “b block*” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

ASA (aspirin) Numerator Logic:

ASA medication codes defined with medication taxonomy DM AUDIT ASPIRIN DRUGS.

Other anti-platelet medication codes defined with medication taxonomy site-populated BGP ANTI-PLATELET DRUGS taxonomy.

Refusal of ASA/other anti-platelet: REF refusal of any ASA or anti-platelet medication in site-populated medication taxonomies DM AUDIT ASPIRIN DRUGS or BGP ANTI-PLATELET DRUGS at least once during the period admission/visit date through the 180 days after discharge/visit date.

Contraindications to ASA/other anti-platelet defined as any of the following occurring ever unless otherwise noted:

A) Patients with prescription for Warfarin/Coumadin using site-populated BGP CMS WARFARIN MEDS taxonomy during the period admission/visit date through the 180 days after discharge/visit date;
B) Hemorrhage diagnosis (POV 459.0);
C) NMI (not medically indicated) refusal for any aspirin at least once during the period admission/visit date through the 180 days after discharge/visit date; or
D) CPT G8008 (Clinician documented that AMI patient was not an eligible candidate to receive aspirin at arrival) at least once during the period admission/visit date through the 180 days after discharge/visit date.

Adverse drug reaction/documentated ASA/other anti-platelet allergy defined as any of the following occurring anytime up to the 180 days after discharge/visit date:

A) POV 995.0-995.3 AND E935.3;
B) “aspirin” entry in ART (Patient Allergies File); or
C) “ASA” or “aspirin” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

ACEI/ARB Numerator Logic:

Ace Inhibitor (ACEI) medication codes defined with medication taxonomy BGP HEDIS ACEI MEDS. ACEI medications: Angiotensin Converting Enzyme Inhibitors (Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril, Perindopril, Quinapril, Ramipril, Trandolopril).

(DELETED: ACEI-Combination Products: Amlodipine-enazepril (Lotrel), Benazepril + HCTZ (Lotensin HCT), Captopril + HCTZ (Capozide, Hydrochlorothiazide + Capropril), Enalapril + HCTZ (Vaseretic), Enalapril-felodipine (Lexcel), Enalapril-diltiazem (Teczem), Fosinopril + HCTZ (Monopril HCT), Lisinopril + HCTZ (Prinzide, Zestoretic, Hydrochlorothiazide + Lisinopril), Moexipril + HCTZ (Uniretic), Quinapril + HCTZ (Accuretic, Quinaretic)).

Refusal of ACEI: REF refusal of any ACE Inhibitor medication in site-populated medication taxonomy BGP HEDIS ACEI MEDS at least once during the period admission/visit date through the 180 days after discharge/visit date.

Contraindications to ACEI defined as any of the following:
1) Diagnosis ever for moderate or severe aortic stenosis (POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, or 747.22) or
2) NMI (not medically indicated) refusal for any ACEI at least once during the period admission/visit date through the 180 days after discharge/visit date.

Adverse drug reaction/documentated ACEI allergy defined as any of the following occurring anytime up to the 180 days after discharge/visit date:
1) POV 995.0-995.3 AND E942.6;
2) “ace inhibitor” or “ACEI” entry in ART (Patient Allergies File); or
3) “ace i*” or “ACEI” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

ARB (Angiotensin Receptor Blocker) medication codes defined with medication taxonomy BGP HEDIS ARB MEDS. ARB medications: Angiotensin II Inhibitors (Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan.)


(DELETED: ARB Combination Products: Candesartan + HCTZ (Atacand HCT), Eprosartan + HCTZ (Teveten HCT), Irbesartan + HCTZ (Avalide HCT), Losartan + HCTZ (Hyzaar HCT), Olmesartan + HCTZ (Benicar HCT), Telmisartan + HCTZ (Micardis HCT), Valsartan + HCTZ (Diovan HCT)).

Refusal of ARB: REF refusal of any ARB medication in site-populated medication taxonomy BGP HEDIS ARB MEDS at least once during the period admission/visit date through the 180 days after discharge/visit date.
**Contraindications to ARB** defined as any of the following:

1) Diagnosis ever for moderate or severe aortic stenosis (POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22) or

2) NMI (not medically indicated) refusal for any ARB at least once during the period admission/visit date through the 180 days after discharge/visit date.

**Adverse drug reaction/document ARB allergy** defined as any of the following occurring anytime up to the 180 days after discharge/visit date:

1) POV 995.0-995.3 AND E942.6;

2) “Angiotensin Receptor Blocker” or “ARB” entry in ART (Patient Allergies File); or

3) “Angiotensin Receptor Blocker” or “ARB” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

**Statins Numerator Logic:**

**Statin medication codes** defined with medication taxonomy BGP HEDIS STATIN MEDS. Statin medications: Atorvostatin (Lipitor), Fluvastatin (Lescol), Lovastatin (Altocor), Mevacor, Pravastatin (Pravachol), Simvastatin (Zocor), Rosuvastatin (Crestor).

**Statin Combination Products:** Advicor, Caduet, PraviGard Pac, Vytorin.

**Refusal of Statin:** REF refusal of any statin medication in site-populated medication taxonomy BGP HEDIS STATIN MEDS at least once during admission/visit date through the 180 days after discharge/visit date.

**Contraindications to Statins** defined as any of the following:

1) Pregnancy, defined as at least two visits during the period admission/visit date through the 180 days after discharge/visit date with POV or Problem diagnosis (V22.0-V23.9, V72.42, 640.*-649.*, 651.*-676.*) and with no documented miscarriage or abortion occurring after the second pregnancy POV. *For pregnancy definition, (1) revised logic from looking for the last two pregnancy diagnoses during the Report Period to the first two diagnoses during the Report Period. (2) Corrected logic to look for an abortion/miscarriage after the second pregnancy diagnosis. Previously, the logic was looking after the date of the first pregnancy diagnosis it found (which represented the patient's next to last diagnosis).*

Miscarriage definition: (1) POV: 630, 631, 632, 633*, 634*, (2) CPT 59812, 59820, 59821, 59830.
Abortion definition: (1) POV: 635*, 636*, 637*,
(2) CPT: 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, S2260-S2267,
(3) Procedure: 69.01, 69.51, 74.91, 96.49; 2) Breastfeeding, defined as POV V24.1 or breastfeeding patient education codes BF-BC, BF-BP, BF-CS, BF-EQ, BF-FU, BF-HC, BF-ON, BF-M, BF-MK, BF-N during the period admission/visit date through the 180 days after discharge/visit date;
3) Acute Alcoholic Hepatitis, defined as POV 571.1 during the period admission/visit date through the 180 days after discharge/visit date; or
4) NMI (not medically indicated) refusal for any statin at least once during the period admission/visit date through the 180 days after discharge/visit date.

Adverse drug reaction/documentated statin allergy defined as any of the following:
1) ALT and/or AST > 3x the Upper Limit of Normal (ULN) (i.e., Reference High) on 2 or more consecutive visits during the period admission/visit date through the 180 days after discharge/visit date;
2) Creatine Kinase (CK) levels > 10x ULN or CK > 10,000 IU/L during the period admission/visit date through the 180 days after discharge/visit date;
3) Myopathy/Myalgia, defined as any of the following during the period admission/visit date through the 180 days after discharge/visit date: POV 359.0-359.9, 729.1, 710.5, or 074.1; 4) any of the following occurring anytime up to the 180 days after discharge/visit date:
   A) POV 995.0-995.3 AND E942.9;
   B) "Statin" or "Statins" entry in ART (Patient Allergies File); or
   C) "Statin" or "Statins" contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

All Medications Numerator Logic:
To be included in this numerator, a patient must have a prescription, refusal, or a contraindication for ALL of the four medication classes (i.e., beta-blocker, ASA/other anti-platelet, ACEI/ARB, AND statin).

Patient List Options
1) List of Active Clinical patients =>35 with AMI Dx with 135-day beta-blocker therapy.
2) List of Active Clinical patients =>35 with AMI Dx without 135-day beta-blocker therapy.
3) List of Active Clinical patients =>35 with AMI Dx with 135-day ASA therapy.
4) List of Active Clinical patients =>35 with AMI Dx without ASA therapy.
5) List of Active Clinical patients =>35 with AMI Dx with 135-day ACEI/ARB therapy.
6) List of Active Clinical patients =>35 with AMI Dx without 135-day ACEI/ARB therapy.
7) List of Active Clinical patients =>35 with AMI Dx with 135-day statin therapy.
8) List of Active Clinical patients =>35 with AMI Dx without 135-day statin therapy.
9) List of Active Clinical patients =>35 with AMI Dx with 135-day therapy for all appropriate meds.
10) List of Active Clinical patients =>35 with AMI Dx without 135-day therapy for all appropriate meds.
2.6.5 Appropriate Medication Therapy in High Risk Patients

Changes from Version 8.0 Patch 3 noted below.

Owner/Contact
Dr. Eric Brody/Mary Wachacha & Chris Lamer, PharmD

Denominator
Active IHD patients ages 22 and older, defined as all Active Clinical patients diagnosed with ischemic heart disease (IHD) prior to the Report Period, AND at least 2 visits during the Report Period, AND 2 IHD-related visits ever.

Numerators
1) Patients with a 180-day course of treatment with or refusal of beta-blockers during the Report Period, or who have a contraindication/previous adverse reaction to beta-blocker therapy.
2) Patients with a 180-day course of treatment with or refusal of ASA (aspirin) or other anti-platelet agent during the Report Period, or who have a contraindication/previous adverse reaction to ASA/anti-platelet therapy.
3) Patients with a 180-day course of treatment with or refusal of ACEIs/ARBs during the Report Period, or who have a contraindication/previous adverse reaction to ACEI/ARB therapy.
4) Patients with a 180-day course of treatment with or refusal of statins during the Report Period, or who have a contraindication/previous adverse reaction to statin therapy.
5) Patients with a 180-day course of treatment for all medications (i.e., beta-blocker, aspirin/anti-platelet, ACEI/ARB, AND statin) during the Report Period, with refusal, and/or who have a contraindication/previous adverse reaction.

Definitions
1) Ischemic Heart Disease (IHD): 410.0-412.*, 414.0-414.9, 428.* or 429.2 recorded in the V POV file.
2) Diabetes: Diagnosed with diabetes (first POV in V POV with 250.00-250.93) prior to the Current Report period, AND at least 2 visits during the Current Report period, AND 2 DM-related visits ever. Patients not meeting these criteria are considered non-diabetics.
3) ALT: Site-populated taxonomy DM AUDIT ALT TAX or LOINC taxonomy.
4) AST: Site-populated taxonomy DM AUDIT AST TAX or LOINC taxonomy.
5) Creatine Kinase: Site-populated taxonomy BGP CREATINE KINASE TAX or LOINC taxonomy.
To be included in the numerators, a patient must meet one of the 3 conditions below:

1) Prescription(s) for the indicated medication with a total days supply of 180 days or more during the Report Period; OR

2) A refusal of the medication during the Report Period; OR

3) Have a contraindication/previous adverse reaction to the indicated medication.

Refusals and contraindications/previous adverse drug reactions (ADR)/allergies are only counted if a patient did not have a prescription for the indicated medication. Patients without a prescription who have a refusal and/or contraindication/ADR/allergy will be counted in sub-numerators B-C. Because a patient may have both a refusal and a contraindication/ADR/allergy, the sub-numerator totals of A-C may not add up to the to the numerator total.

For prescriptions, the days supply requirement may be met with a single prescription or from a combination of prescriptions for the indicated medication that were filled during the Report Period and prescriptions filled prior to the Report Period but which are still active (i.e., prior active prescription). Prior active prescriptions can be included if the treatment days fall within the Report Period. Prior active prescription defined as most recent prescription for the indicated medication (see codes below) prior to Report Period Start Date with the number of days supply equal to or greater than the Report Period Start Date minus the prescription date.

**Note:** If a prescription for a medication was started and then discontinued, CRS will recalculate the # Days Prescribed by subtracting the prescription date (i.e., visit date) from the V Medication Discontinued Date. For example: Rx Date=11/15/2006, Discontinued Date=11/19/2006, Recalculated # Days Prescribed=4.

**Example of patient included in the beta-blocker numerator with prior active prescription:**

- Must have 180 days supply of indicated medication 6/30/2006 (end of Report Period)
- Prior Beta-Blocker Rx Date: 06/01/2005
- # Days Prescribed: 60 (treats patient through 07/31/2005)
- Report Period Start Date minus Rx Date: 07/01/2005-06/01/2005 = 30; 60 (#Days Prescribed) is >= 30, prescription is considered Prior Active Rx
- 07/31/2005 is between the Report Period of 07/01/2005 and 06/30/2006, thus remainder of Prior Active Rx can be counted toward 180-days supply
- # Remaining Days Prescribed from Prior Active Rx: 
  \[ (# \text{ Days Prescribed} - \text{(Report Period Start Date-Prior Rx Date)}) = 60-(07/01/2005-06/01/2005) = 60-30 = 30 \]
− Rx #2: 08/05/2005, # Days Prescribed: 90
− Rx #3: 11/10/2005, #Days Prescribed: 90
− Total Days Supply Prescribed between 07/01/2005 and 06/30/2006, including prior active prescription: 30+90+90=210

Numerator Logic: In the logic below, "ever" is defined as anytime through the end of the Report Period.

**Beta-Blocker Numerator Logic:**

*Medications are: Noncardioselective Beta Blockers: Carteolol, Carvedilol, Labetalol, Nadolol, Penbutolol, Pindolol, Propranolol, Timolol, Sotalol; Cardioselective Beta Blockers: Acebutolol, Atenolol, Betaxolol, Bisoprolol, Metoprolol, Nebivolol; and Antihypertensive Combinations: Atenolol-chlorthalidone, Bendroflumethiazide-nadolol, Bisoprolol-hydrochlorothiazide, Hydrochlorothiazide-metoprolol, Hydrochlorothiazide-propranolol, and Hydrochlorothiazide-timolol. (Updated list of medications).*

**Refusal of beta-blocker:** REF refusal of any beta-blocker medication in site-populated medication taxonomy BGP HEDIS BETA BLOCKER MEDS at least once during the Report Period.

**Contraindications to beta-blockers** defined as any of the following occurring ever unless otherwise noted:

A) Asthma - 2 diagnoses (POV) of 493* on different visit dates;
B) Hypotension - 1 diagnosis of 458*;
C) Heart block >1 degree - 1 diagnosis of 426.0, 426.12, 426.13, 426.2, 426.3, 426.4, 426.51, 426.52, 426.53, 426.54, or 426.7;
D) Sinus bradycardia - 1 diagnosis of 427.81;
E) COPD - 2 diagnoses on different visit dates of 491.2*, 496, or 506.4, or a combination of any of these codes, such as 1 visit with 491.20 and 1 with 496;
F) NMI (not medically indicated) refusal for any beta-blocker at least once during the Report Period; or
G) CPT G8011 (Clinician documented that AMI patient was not an eligible candidate for beta-blocker at arrival) at least once during the Report Period.

Adverse drug reaction/document beta blocker allergy defined as any of the following occurring ever:

A) POV 995.0-995.3 AND E942.0;
B) “beta block*” entry in ART (Patient Allergies File); or
C) “beta block*”, “bblock*” or “b block*” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

**ASA (aspirin)/Other Anti-Platelet Numerator Logic:**

*ASA medication codes* defined with medication taxonomy DM AUDIT ASPIRIN DRUGS.
**Other anti-platelet medication codes** defined with medication taxonomy site-populated BGP ANTI-PLATELET DRUGS taxonomy.

**Refusal of ASA/other anti-platelet:** REF refusal of any ASA or anti-platelet medication in site-populated medication taxonomies DM AUDIT ASPIRIN DRUGS or BGP ANTI-PLATELET DRUGS at least once during the Report Period.

**Contraindications to ASA/other anti-platelet** defined as any of the following occurring ever unless otherwise noted:

A) Patients with a 180-day course of treatment for Warfarin/Coumadin during the Report Period, using site-populated BGP CMS WARFARIN MEDS taxonomy;

B) Hemorrhage diagnosis (POV 459.0);

C) NMI (not medically indicated) refusal for any aspirin at least once during the Report Period; or

D) CPT G8008 (Clinician documented that AMI patient was not an eligible candidate to receive aspirin at arrival) at least once during the Report Period.

Adverse drug reaction/documentated ASA/other anti-platelet allergy defined as any of the following occurring anytime ever:

A) POV 995.0-995.3 AND E935.3;

B) “aspirin” entry in ART (Patient Allergies File); or

C) “ASA” or “aspirin” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

**ACEI/ARB Numerator Logic:**

**Ace Inhibitor (ACEI) medication codes** defined with medication taxonomy BGP HEDIS ACEI MEDS. ACEI medications: Angiotensin Converting Enzyme Inhibitors (Benazepril, Captopril, Enalapril, Fosinopril, Lisinopril, Moexipril, Perindopril, Quinapril, Ramipril, Trandolopril).

(DELETED: ACEI-Combination Products: Amlodipine-benazepril (Lotrel), Benazepril + HCTZ (Lotensin HCT), Captopril + HCTZ (Capozide, Hydrochlorothiazide + Capropril), Enalapril + HCTZ (Vaseretic), Enalapril-felodipine (Lexcel), Enalapril-diltiazem (Teczem), Fosinopril + HCTZ (Monopril HCT), Lisinopril + HCTZ (Prinzide, Zestoretic, Hydrochlorothiazide + Lisinopril), Moexipril + HCTZ (Uniretic), Quinapril + HCTZ (Accuretic, Quinaretic)).

Refusal of ACEI: REF refusal of any ACE Inhibitor medication in site-populated medication taxonomy BGP HEDIS ACEI MEDS at least during the Report Period.

Contraindications to ACEI defined as any of the following:
1) Diagnosis ever for moderate or severe aortic stenosis (POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, or 747.22) or
2) NMI (not medically indicated) refusal for any ACEI at least once during the Report Period.

Adverse drug reaction/documentated ACEI allergy defined as any of the following occurring anytime through the end of the Report Period:
1) POV 995.0-995.3 AND E942.6;
2) “ace inhibitor” or “ACEI” entry in ART (Patient Allergies File); or
3) “ace i*” or “ACEI” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

ARB (Angiotensin Receptor Blocker) medication codes defined with medication taxonomy BGP HEDIS ARB MEDS. ARB medications: Angiotensin II Inhibitors (Candesartan, Eprosartan, Irbesartan, Losartan, Olmesartan, Telmisartan, Valsartan.)


(DELETED: ARB Combination Products: Candesartan + HCTZ (Atacand HCT), Eprosartan + HCTZ (Teveten HCT), Irbesartan + HCTZ (Avalide HCT), Losartan HCTZ (Hyzaar HCT), Olmesartan + HCTZ (Benicar HCT), Telmisartan + HCTZ (Micardis HCT), Valsartan + HCTZ (Diovan HCT)).

Refusal of ARB: REF refusal of any ARB medication in site-populated medication taxonomy BGP HEDIS ARB MEDS at least once during the Report Period.
**Contraindications to ARB** defined as any of the following: Diagnosis ever for moderate or severe aortic stenosis (POV 395.0, 395.2, 396.0, 396.2, 396.8, 424.1, 425.1, 747.22) or 2) NMI (not medically indicated) refusal for any ARB at least once during the Report Period.

**Adverse drug reaction/document ARB allergy** defined as any of the following occurring anytime through the end of the Report Period:

1. POV 995.0-995.3 AND E942.6;  
2. “Angiotensin Receptor Blocker” or “ARB” entry in ART (Patient Allergies File); or  
3. “Angiotensin Receptor Blocker” or “ARB” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

**Statins Numerator Logic**:

**Statin medication codes** defined with medication taxonomy BGP HEDIS STATIN MEDS. Statin medications: Atorvostatin (Lipitor), Fluvastatin (Lescol), Lovastatin (Altocor), Mevacor, Pravastatin (Pravachol), Simvastatin (Zocor), Rosuvastatin (Crestor).

**Statin Combination Products**: Advicor, Caduet, PraviGard Pac, Vytorin.

Refusal of Statin: REF refusal of any statin medication in site-populated medication taxonomy BGP HEDIS STATIN MEDS at least once during the Report Period.

**Contraindications to Statins** defined as any of the following:

1. Pregnancy, defined as at least two visits during the Report Period with POV or Problem diagnosis (V22.0-V23.9, V72.42, 640.*-649.*, 651.*-676.*) and with no documented miscarriage or abortion occurring after the second pregnancy POV. *For pregnancy definition, (1) revised logic from looking for the last two pregnancy diagnoses during the Report Period to the first two diagnoses during the Report Period. (2) Corrected logic to look for an abortion/miscarriage after the second pregnancy diagnosis. Previously, the logic was looking after the date of the first pregnancy diagnosis it found (which represented the patient’s next to last diagnosis).*

   **Miscarriage definition**: (1) POV: 630, 631, 632, 633*, 634*, (2) CPT 59812, 59820, 59821, 59830.

   **Abortion definition**: (1) POV: 635*, 636* 637*, (2) CPT: 59100, 59120, 59130, 59136, 59150, 59151, 59840, 59841, 59850, 59851, 59852, 59855, 59856, 59857, S2260-S2267, (3) Procedure: 69.01, 69.51, 74.91, 96.49;


3. Acute Alcoholic Hepatitis, defined as POV 571.1 during the Report Period, or
4) NMI (not medically indicated) refusal for any statin at least once during the Report Period.

**Adverse drug reaction/documented statin allergy** defined as any of the following:

1) ALT and/or AST > 3x the Upper Limit of Normal (ULN) (i.e., Reference High) on 2 or more consecutive visits during the Report Period;
2) Creatine Kinase (CK) levels > 10x ULN or CK > 10,000 IU/L during the Report Period;
3) Myopathy/Myalgia, defined as any of the following during the Report Period: POV 359.0-359.9, 729.1, 710.5, or 074.1;
4) any of the following occurring anytime through the end of the Report Period:
   A) POV 995.0-995.3 AND E942.9;
   B) “Statin” or “Statins” entry in ART (Patient Allergies File); or
   C) “Statin” or “Statins” contained within Problem List or in Provider Narrative field for any POV 995.0-995.3 or V14.8.

**All Medications Numerator Logic:**
To be included in this numerator, a patient must have a prescription, refusal, or a contraindication for ALL of the four medication classes (i.e., beta-blocker, ASA/other anti-platelet, ACEI/ARB, AND statin).

**Patient List Options**
1) List of Active IHD patients 22+ with 180-day beta-blocker therapy.
2) List of Active IHD patients 22+ without 180-day beta-blocker therapy.
3) List of Active IHD patients 22+ with 180-day ASA therapy.
4) List of Active IHD patients 22+ without 180-day ASA therapy.
5) List of Active IHD patients 22+ with 180-day ACEI/ARB therapy.
6) List of Active IHD patients 22+ without 180-day ACEI/ARB therapy.
7) List of Active IHD patients 22+ with 180-day statin therapy.
8) List of Active IHD patients 22+ without 180-day statin therapy.
9) List of Active IHD patients 22+ with 180-day therapy for all appropriate meds.
10) List of Active IHD patients 22+ without 180-day therapy for all appropriate meds.
2.6.6 Cholesterol Management for Patients with Cardiovascular Conditions

Changes from Version 8.0 Patch 3 noted below.

Owner/Contact
Dr. Eric Brody/Mary Wachacha & Chris Lamer, PharmD

Denominator
Active Clinical patients ages 18 to 75 who, during the first 10 months of the year prior to the beginning of the Report period, were diagnosed with acute myocardial infarction (AMI), coronary artery bypass graft (CABG), or percutaneous transluminal coronary angioplasty (PTCA), OR who were diagnosed with ischemic vascular disease (IVD) during the Report Period and the year prior to the Report Period (changed timeframe for IVD).

Numerators
1) Patients with LDL completed during the Report Period, regardless of result.
   A) Patients with LDL <=100, completed during the Report Period.
   B) Patients with LDL 101-130, completed during the Report Period.
   C) Patients with LDL >130, completed during the Report Period.

Definitions
1) AMI: POV 410.*0 or 410.*1.
2) PTCA:
   A) V Procedure 00.66, 36.01 (old code), 36.02 (old code), 36.05, (old code), 36.06-36.07, or 36.09 or
3) CABG:
   A) V Procedure 36.1*, 36.2 or
   B) CPT 33510-33514, 33516-33519, 33521-33523, 33533-33536, (DELETED: 35600, 33572), S2205-S2209.
4) IVD: 411.*, 413.*, 414.0*, 414.2, 414.8, 414.9, 429.2, 433.*-434.*, 440.1, 440.2*, 440.4, 444.*, or 445.*.
5) LDL: Searches for most recent LDL test with a result during the Report Period. 
   If more than one LDL test is found on the same day and/or the same visit and one test has a result and the other does not, the test with the result will be used. If an LDL test with a result is not found, CRS searches for the most recent LDL test without a result. LDL defined as: CPT 80061, 83700, 83701, 83704, 83715 (old code), 83716 (old code), 83721, 3048F, 3049F, 3050F; LOINC taxonomy; site-populated taxonomy DM AUDIT LDL CHOLESTEROL TAX. For numerator LDL =<100, CPT 3048F will count as meeting the measure.
Patient List Options

1) List of Active Clinical patients 18-75 with DX of AMI, CABG, PTCA, or IVD with LDL completed, regardless of result.
2) List of Active Clinical patients 18-75 with DX of AMI, CABG, PTCA, or IVD without LDL completed.
3) List of Active Clinical patients 18-75 with DX of AMI, CABG, PTCA, or IVD with LDL <=100.
4) List of Active Clinical patients 18-75 with DX of AMI, CABG, PTCA, or IVD with LDL 101-130.
5) List of Active Clinical patients 18-75 with DX of AMI, CABG, PTCA, or IVD with LDL >130.
2.6.7 Heart Failure and Evaluation of LVS Function

No changes from Version 8.0 Patch 3.

Owner/Contact
Dr. Eric Brody/ Mary Wachacha & Chris Lamer, PharmD

Denominator
Active Clinical ages 18 or older discharged with heart failure during the Report Period.

Numerator
Patients whose LVS function was evaluated before arrival, during hospitalization, or is planned for after discharge.

Definitions

1) **Heart Failure**: Primary diagnosis code of 398.91, 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 428.0, 428.1, 428.20, 428.21, 428.22, 428.23, 428.30, 428.31, 428.32, 428.33, 428.40, 428.41, 428.42, 428.43, 428.9, 429.1, or 997.1 AND with Service Category H (hospitalization).

   **Note:** If a patient has multiple admissions matching this criteria during the Report Period, the earliest admission will be used.

2) **Comfort Measures**: V66.7 (Encounter for palliative care) documented during hospital stay.

3) **LVAD/Heart Transplant**: Any of the following during hospital stay: V Procedure 33.6, 37.41, 37.51-37.54, 37.61-37.66, 37.68.

4) **Evaluation of LVS (Left Ventricular Systolic) Function**: Any of the following:

   A) An ejection fraction ordered or documented anytime one year prior to discharge date, defined as any of the following:

      1) V Measurement “CEF”;
      2) V Procedure 88.53, 88.54;
      3) V CPT 78414, 78468, 78472, 78473, 78480, 78481, 78483, 78494, 93303, 93304, 93307, 93308, 93312, 93314-93318, 93350, 93354, 93555.

   B) RCIS order for Cardiovascular Disorders referral that is ordered during the hospital stay but no later than the hospital discharge date. (RCIS referral defined as: ICD Diagnostic Category "Cardiovascular Disorders" combined with any of the following CPT Categories: “Evaluation and/or Management, “Non-surgical Procedures” or “Diagnostic Imaging.”)

   C) Any of the following documented anytime one year prior to discharge date:

      1) Echocardiogram: V Procedure 88.72, 37.28, 00.24;
      2) Nuclear Medicine Test: V Procedure 92.2*;
3) Cardiac Catheterization with a Left Ventriculogram: V Procedure 37.22, 37.23, 88.53, 88.54.

**Denominator Exclusions:**
Defined as any of the following:

1) Patients receiving comfort measures only (i.e., patients who received palliative care and usual interventions were not received because a medical decision was made to limit care).
2) Patients with a Discharge Type of Transferred or Irregular or containing “Death.”
3) Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospitalization.

**Patient List Options**

1) List of Active Clinical heart failure patients 18+ who received evaluation of LVS function.
2) List of Active Clinical heart failure patients 18+ who did not receive evaluation of LVS function.
2.7  **STD-Related Group**

2.7.1  **HIV Screening**

*No Changes from Version 8.0 Patch 3.*

**Owner/Contact**

Drs. Scott Giberson, Marie Russell, Jim Cheek, and John Redd

**Denominator**

User Population patients ages 13-64 with no recorded HIV diagnosis ever.

**Numerator**

1) Patients who were screened for HIV during the Report Period, including refusals.
   A) Number of documented refusals.

2) No denominator. This measure is a total count only, not a percentage. Number of HIV screens provided to User Population patients during the Report Period, where the patient was not diagnosed with HIV anytime prior to the screen.

**Definitions**

1) **HIV diagnosis** defined as any of the following documented anytime prior to the end of the Report Period: POV or Problem List codes 042, 042.0-044.9 (old codes), 079.53, V08, or 795.71.

2) **HIV Screening**: CPT 86689, 86701-86703, 87390, 87391, 87534-87539; LOINC taxonomy; site-populated taxonomy BGP HIV TEST TAX; or Refusal of any lab test in site-populated taxonomy BGP HIV TEST TAX. For the number of HIV screens provided to User Population patients numerator (count only), a maximum of one HIV screen per patient per day will be counted and refusals are not included.

**Patient List Options**

1) List of User Population patients 13-64 with HIV screening or refusal.

2) List of User Population patients 13-64 without HIV screening or refusal.
2.7.2 Sexually Transmitted Infection (STI) Screening

No Changes from Version 8.0 Patch 3.

Owner/Contact
Dr. Scott Giberson

Denominator
Screenings needed for incidents of key sexually transmitted infections (STIs) for Active Clinical patients that occurred during the period 60 days prior to the beginning of the Report Period through the first 300 days of the Report Period. Key STIs defined as Chlamydia, gonorrhea, HIV/AIDS, and syphilis.

Numerators
1) No denominator; count only. The total count of Active Clinical patients who were diagnosed with one or more key sexually transmitted infections (STIs) during the period 60 days prior to the Report Period through the first 300 days of the Report Period.
2) No denominator; count only. The total count of separate key STI incidents for Active Clinical patients during the defined period.
3) For use with denominator #1: Total number of needed screenings performed or refused from one month prior to the date of relevant STI incident through two months after.

Definitions
1) Key Sexually Transmitted Infections (STIs): Chlamydia, gonorrhea, HIV/AIDS, and syphilis. Key STIs defined with the following POVS:
   A) Chlamydia: 077.98, 078.88, 079.88, 079.98, 099.41, 099.50-099.59
   B) Gonorrhea: 098.0-098.89
   C) HIV/AIDS: 042, 042.0-044.9, 079.53, 795.71, V08
   D) Syphilis: 090.0-093.9, 094.1-097.9

Logic for Identifying Patients Diagnosed with Key STI (numerator #1):
Any patient with one or more diagnoses of any of the key STIs defined above during the period 60 days prior to the beginning of the Report Period through the first 300 days of the Report Period.
Logic for Identifying Separate Incidents of Key STIs (numerator #2):

One patient may have one or multiple occurrences of one or multiple STIs during the year. Incidents of an STI are identified beginning with the date of the first key STI diagnosis (see definition above) occurring between 60 days prior to the beginning of the Report Period through the first 300 days of the Report Period. A second incident of the same STI is counted if another diagnosis with the same STI occurs two months or more after the initial diagnosis. A different STI diagnosis that occurs during the same 60-day time period as the first STI counts as a separate incident.

Example of Patient with Multiple Incidents of Single STI:

<table>
<thead>
<tr>
<th>Date</th>
<th>Visit</th>
<th>Total Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/01/08</td>
<td>Patient screened for Chlamydia</td>
<td>0</td>
</tr>
<tr>
<td>08/08/08</td>
<td>Patient diagnosed with Chlamydia</td>
<td>1</td>
</tr>
<tr>
<td>10/15/08</td>
<td>Patient diagnosed with Chlamydia</td>
<td>2</td>
</tr>
<tr>
<td>10/25/08</td>
<td>Follow-up for Chlamydia</td>
<td>2</td>
</tr>
<tr>
<td>11/15/08</td>
<td>Patient diagnosed with Chlamydia</td>
<td>2</td>
</tr>
<tr>
<td>03/01/09</td>
<td>Patient diagnosed with Chlamydia</td>
<td></td>
</tr>
</tbody>
</table>

Denominator Logic for Needed Screenings (denominator #1):

One patient may need multiple screening tests based on one or more STI incidents occurring during the time period.

To be included in the needed screening tests denominator, the count will be derived from the number of separate STI incidents and the type(s) of screenings recommended for each incident. The recommended screenings for each key STI are listed in the following table.

<table>
<thead>
<tr>
<th>STI</th>
<th>Screenings Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>Gonorrhea, HIV/AIDS, Syphilis</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>Chlamydia, HIV/AIDS, Syphilis</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>Chlamydia, Gonorrhea, Syphilis</td>
</tr>
<tr>
<td>Syphilis</td>
<td>Chlamydia, Gonorrhea, HIV/AIDS</td>
</tr>
</tbody>
</table>

“Needed” screenings are recommended screenings that are further evaluated for contraindications. The following are reasons that a recommended screening is identified as not needed (i.e., contraindicated).

1) The patient has a documented STI diagnosis corresponding to the screening type in the same time period. For example, a patient with both a Chlamydia and a gonorrhea diagnosis on the same visit does not need the recommended Chlamydia screening based on the gonorrhea diagnosis.
2) Only one screening for each type of STI is needed during the relevant time period, regardless of the number of different STI incidents identified. For example, if a patient is diagnosed with Chlamydia and Gonorrhea on the same visit, only one screening each is needed for HIV/AIDS and Syphilis.

3) A patient with HIV/AIDS diagnosis prior to any STI diagnosis that triggers a recommended HIV/AIDS screening does not need the screening ever.

**Numerator Logic:**
To be counted in the numerator, each needed screening in the denominator must have a corresponding lab test or test refusal documented in the period from one month prior to the relevant STI diagnosis date through two months after the STI incident.

**Chlamydia Screening:** Any of the following during the specified time period: 1) POV V73.88, V73.98; 2) CPT 86631-86632, 87110, 87270, 87320, 87490-87492, 87810; 3) site-populated taxonomy BGP CHLAMYDIA TESTS TAX; or 4) LOINC taxonomy.

**Gonorrhea Screening:** Any of the following during the specified time period: 1) CPT 87590-87592, 87850; 2) site-populated taxonomy BKM GONORRHEA TEST TAX; or 3) LOINC taxonomy.

**HIV/AIDS Screening:** Any of the following during the specified time period: 1) CPT 86689, 86701-86703, 87390-87391, 87534-87539; 2) site-populated taxonomy BGP HIV TEST TAX; or 3) LOINC taxonomy.

**Syphilis Screening:** Any of the following during the specified time period: 1) CPT 86592-86593, 86781, 87285; 2) site-populated taxonomy BKM FTA-ABS TESTS TAX or BKM RPR TESTS TAX; 3) LOINC taxonomy.

**Refusal of Any Screening:** Any refusal type (REF, NMI, etc.) for any of the four screening tests as defined above during the specified time period.

**Logic Examples:**

**Example of Patient with Single Diagnosis of Single STI**
08/01/08: Patient screened for Chlamydia  
08/08/08: Patient diagnosed with Chlamydia - 3 screens needed: Gonorrhea, HIV/AIDS, Syphilis  
08/13/08: Patient screened for Gonorrhea, HIV/AIDS, Syphilis  
Result: Denominator: 3 screens needed, Numerator: 3 screens performed

**Example of Patient with Multiple Diagnoses of Single STI**
08/01/08: Patient screened for Chlamydia  
08/08/08: Patient diagnosed with Chlamydia (Incident #1) - 3 screens needed: Gonorrhea, HIV/AIDS, Syphilis  
08/13/08: Patient screened for Gonorrhea, HIV/AIDS, Syphilis  
12/01/08: Patient screened for Chlamydia
12/08/08: Patient diagnosed with Chlamydia (Incident #2) - 3 screens needed: Gonorrhea, HIV/AIDS, Syphilis

Result: Denominator: 6 screens needed (2 each of 3 types), Numerator: 3 screens performed (1 each of 3 types)

Example of Patient with Single Diagnosis of Multiple STIs
10/15/08: Patient screened for Chlamydia, Gonorrhea, HIV/AIDS, Syphilis
10/18/08: Patient diagnosed with Chlamydia - 3 screens needed: Gonorrhea, HIV/AIDS, Syphilis
10/20/08: Patient diagnosed with Syphilis - removes needed screen for Syphilis (see above)

Result: Denominator: 2 screens needed, Numerator: 2 screens performed prior to triggering diagnoses but within timeframe)

Example of Patient with Multiple Diagnoses of Multiple STIs
06/15/04: Patient diagnosed with HIV/AIDS
08/01/08: Patient screened for Chlamydia and Gonorrhea
08/08/08: Patient diagnosed with Chlamydia and Gonorrhea (Incident #1) - 1 screen needed: Syphilis (HIV/AIDS not needed since prior diagnosis)
08/08/08: Patient screened for HIV/AIDS and Syphilis - since only the Syphilis screen is needed, the HIV/AIDS screen is not counted at all
12/01/08: Patient screened for Chlamydia
12/08/08: Patient diagnosed with Chlamydia (Incident #2) - 2 screens needed: Gonorrhea and Syphilis
12/10/08: Patient screened for Syphilis

Result: Denominator: 3 screens needed (2 Syphilis and 1 Gonorrhea), Numerator: 2 screens performed (2 Syphilis)

**Patient List Options**

1) List of Active Clinical patients diagnosed with an STI who were screened for other key STIs.
2) List of Active Clinical patients diagnosed with an STI who were not screened for other key STIs.
2.8 Other Clinical Measures Group

2.8.1 Prediabetes/Metabolic Syndrome

Changes from Version 8.0 Patch 3 noted below.

Owner/Contact
Drs. Stephen J. Rith Najarian and Kelly Moore

Denominator
Active Clinical patients ages 18 and older diagnosed with prediabetes/metabolic syndrome without a documented history of diabetes.

Numerators
1) Patients with all screenings.
2) Patients with Blood Pressure documented at least twice during the Report Period.
3) Patients with LDL completed, regardless of result, during the Report Period.
4) Patients with fasting glucose test, regardless of result, during the Report Period.
5) Patients with nephropathy assessment, defined as an estimated GFR and a quantitative urinary protein assessment (changed from positive urine protein or any microalbuminuria) during the Report Period OR with evidence of diagnosis and/or treatment of ESRD at any time before the end of the Report period.
6) Patients who have been screened for tobacco use during the Report Period.
7) Patients for whom a BMI could be calculated, including refusals in the past year.
8) Patients who have received any lifestyle adaptation counseling, including medical nutrition counseling, or nutrition, exercise or other lifestyle education during the Report Period.
9) Patients screened for depression or diagnosed with a mood disorder at any time during the Report period, including documented refusals in past year.

Definitions
1) Age is calculated at beginning of the Report Period.
2) Prediabetes/Metabolic Syndrome: Diagnosis of prediabetes/metabolic syndrome, defined as: two visits during the Report Period with POV 277.7, OR one each of at least three different conditions listed below, occurring during the Report Period except as otherwise noted:
   A) BMI => 30 OR Waist Circumference >40 inches for men or >35 inches for women,
   B) Triglyceride value >=150,
   C) HDL value <40 for men or <50 for women,
   D) Patient diagnosed with hypertension OR mean Blood Pressure value => 130/85 where systolic is =>130 OR diastolic is =>85,
E) Fasting Glucose value =>100 AND <126.

NOTE: Waist circumference and fasting glucose values will be checked last.

3) **Patients without Diabetes**: No diabetes diagnosis ever (POV 250.00-250.93).

4) **BMI**: CRS calculates BMI at the time the report is run, using NHANES II. For 18 and under, a height and weight must be taken on the same day any time during the Report Period. For 19 through 50, height and weight must be recorded within last 5 years, not required to be on the same day. For over 50, height and weight within last 2 years not required to be recorded on same day. Refusals include REF (refused), NMI (not medically indicated) and UAS (unable to screen) and must be documented during the past year. For ages 18 and under, both the height and weight must be refused on the same visit at any time during the past year. For ages 19 and older, the height and the weight must be refused during the past year and are not required to be on the same visit.

5) **Triglyceride**: LOINC taxonomy; or site-populated taxonomy DM AUDIT TRIGLYCERIDE TAX with a non-null, numeric result.

6) **HDL**: CPT 83718; LOINC taxonomy; or site-populated taxonomy DM AUDIT HDL TAX with a non-null, numeric result.

7) **Fasting Glucose**: Denominator definition: LOINC taxonomy or site-populated taxonomy DM AUDIT FASTING GLUCOSE TESTS with a non-null, numeric result;

   Numerator definition: POV 790.21; LOINC taxonomy; or site-populated taxonomy DM AUDIT FASTING GLUCOSE TESTS.

8) **LDL**: Finds last test done during the Report period; defined as: CPT 80061, 83700, 83701, 83704, 83715 (old code), 83716 (old code), 83721, 3048F, 3049F, 3050F; LOINC taxonomy; or site-populated taxonomy DM AUDIT LDL CHOLESTEROL TAX.

9) **Blood Pressure**: CRS uses mean of last 3 Blood Pressures documented on non-ER visits during the Report Period. If 3 BPs are not available, uses mean of last 2 non-ER BPs. If a visit contains more than 1 BP, the lowest BP will be used, defined as having the lowest systolic value. The mean Systolic value is calculated by adding the last 3 (or 2) systolic values and dividing by 3 (or 2). The mean Diastolic value is calculated by adding the diastolic values from the last 3 (or 2) blood pressures and dividing by 3 (or 2).

   For the BP documented numerator, if CRS is not able to calculate a mean BP, it will search for CPT 3074F-3080F 3074F-3076F, 3078F-3079F) documented on a non-ER visit during the Report Period.

10) **Hypertension**: Diagnosis of (POV or problem list) 401.* occurring prior to the Report period, and at least one hypertension POV during the Report period.

11) **Estimated GFR**: Any of the following: Site-populated taxonomy BGP GPRA ESTIMATED GFR TAX or LOINC taxonomy.
12) **Quantitative Urine Protein Assessment**: Any of the following: CPT 82042, 82043, or 84156; LOINC taxonomy; or site-populated taxonomy BGP QUANT URINE PROTEIN (*Note*: Be sure and check with your laboratory supervisor that the names you add to your taxonomy reflect quantitative test values).

13) **End Stage Renal Disease Diagnosis/Treatment**: ANY of the following ever:
   A) V CPT 36145, 36800, 36810, 36815, 36818, 36819, 36820, 36821, 36831-36833, 50300, 50320, 50340, 50360, 50365, 50370, 50380, 90951-90970 or (old codes) 90918-90925, 90935, 90937, 90939 (old code), 90940, 90945, 90947, 90989, 90993, 90997, 90999, 99512, G0257, G0308-G0327, G0392, G0393, or S9339; B) V POV 585.5, 585.6, V42.0, V45.1 (old code), V45.11, V45.12, or V56.*; C) V Procedure 38.95, 39.27, 39.42, 39.43, 39.43, 39.53, 39.93-39.95, 54.98, or 55.6*.

14) **Tobacco Screening**: At least one of the following during the Report Period:
   A) Any health factor for category Tobacco documented during Current Report period;  
   B) Tobacco-related diagnoses (POV or current Active Problem List) 305.1, 305.1* (old codes), 649.00-649.04, or V15.82;  
   C) Dental code 1320; D) Any patient education code containing "TO-", "-TO", "-SHS", 305.1, 305.1* (old codes), 649.00-649.04, or V15.82; E) CPT 99406, 99407, G0375 (old code), G0376 (old code), 1034F, 1035F, or 1036F.

15) **Lifestyle Counseling**: Any of the following during the Report Period:
   A) Medical nutrition counseling defined as: CPT 97802-97804, G0270, G0271; Provider codes 07, 29, 97, 99; Clinic codes 67 (dietary) or 36 (WIC),  
   B) Nutrition education defined as: POV V65.3 dietary surveillance and counseling; patient education codes ending ",-N" (Nutrition) or ",-MNT" (or old code ",-DT" (Diet)) or containing V65.3,  
   C) Exercise education defined as: POV V65.41 exercise counseling; patient education codes ending ",-EX" (Exercise), or containing V65.41,  
   D) Related exercise and nutrition counseling defined as: patient education codes ending ",-LA" (lifestyle adaptation) or containing "OBS-" (obesity) or 278.00 or 278.01.

16) **Depression Screening/Mood Disorder DX**: Any of the following during the Report Period:
   A) Depression Screening:  
      1) Exam Code 36,  
      2) POV V79.0,  
      3) BHS problem code 14.1 (screening for depression),  
      4) V Measurement in PCC or BH of PHQ2 or PHQ9, or  
      5) refusal, defined as any PCC refusal in past year with Exam Code 36.
B) Mood Disorder DX: At least two visits in PCC or BHS during the Report period with POV for: Major Depressive Disorder, Dysthymic Disorder, Depressive Disorder NOS, Bipolar I or II Disorder, Cyclothymic Disorder, Bipolar Disorder NOS, Mood Disorder Due to a General Medical Condition, Substance-induced Mood Disorder, or Mood Disorder NOS. These POV codes are: 296.*, 291.89, 292.84, 293.83, 300.4, 301.13, or 311 or BHS POV 14 or 15.

Patient List Options

1) List of Active Clinical patients =>18 w/Prediabetes/Metabolic Syndrome with all assessments.

2) List of Active Clinical patients =>18 w/Prediabetes/Metabolic Syndrome without all assessments.
2.8.2 Public Health Nursing

No changes from Version 8.0 Patch 3.

Owner/Contact
Cheryl Peterson, RN

Denominators
1) No numerator; count of visits only. Number of visits to User Population patients by PHNs in any setting, including Home.
   A) Number of visits to patients ages 0-28 days (Neonate) in any setting.
   B) Number of visits to patients ages 29 days - 12 months (infants) in any setting.
   C) Number of visits to patients ages 1-64 years in any setting.
   D) Number of visits to patients ages 65 and older (Elders) in any setting.
2) No numerator; count of visits only. Number of visits to User Population patients by PHNs in Home setting.
   A) Number of Home visits to patients ages 0-28 days (Neonate).
   B) Number of Home visits to patients ages 29 days - 12 months (infants).
   C) Number of Home visits to patients ages 1-64 years.
   D) Number of visits to patients ages 65 and older (Elders) in any setting.
   E) Number of PHN driver/interpreter (provider code 91) visits in a HOME setting.

Numerator
None

Definitions
1) **PHN Visit-Any Setting**: Any visit with primary or secondary provider codes 13 or 91.
2) **PHN Visit-Home**: Any visit with
   A) Clinic code 11 and a primary or secondary provider code of 13 or 91, or
   B) Location Home (as defined in Site Parameters) AND a primary or secondary provider code 13 or 91.

Patient List Options
1) List of patients with a PHN visit(s) in any setting, including Home.
2) List of patients with a PHN visit(s) in Home setting
2.8.3 Breastfeeding Rates

Changes from Version 8.0 Patch 3 noted below.

DELETED: All performance measures and logic for Breastfeeding Rates from the CRS Version 9.0 ONM Report. Refer to CRS Version 9.0 COM Selected Measures Report for Breastfeeding Rates measures and logic.
3.0 Contact Information

If you have any questions or comments regarding this distribution, please contact the OIT Help Desk (IHS).

**Phone:** (505) 248-4371 or (888) 830-7280 (toll free)

**Fax:** (505) 248-4363

**Web:** [http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm](http://www.ihs.gov/GeneralWeb/HelpCenter/Helpdesk/index.cfm)

**Email:** support@ihs.gov